

# CHAPTER 2

## ALTERNATIVES

# CHAPTER 2 ALTERNATIVES

## 2.1 INTRODUCTION

This chapter describes a range of alternatives to manage the resources and uses within the Prehistoric Trackways National Monument (PTNM). The National Environmental Policy Act (NEPA) requires Federal agencies to consider a reasonable range of alternative approaches when proposing and analyzing Federal actions. The different alternatives within this Chapter are developed with guidance from professional resource specialists, the designating Legislation- Public Law 111-11 (located in Appendix A), NEPA, the Federal Land Policy and Management Act (FLPMA), BLM regulations and policies, and public input.

Three management alternatives have been developed and analyzed for the PTNM along with the No Action Alternative, which is a requirement by the Council on Environmental Quality (CEQ). The No Action Alternative is a description of the current management, which is a combination of management decisions, goals, and objectives from the Mimbres RMP, the Legislation, and current policies and regulations. The No Action Alternative allows for a point of reference for the other three developed management alternatives.

Proposed within this Chapter are two different types of decisions. Those decisions are either planning (broad overarching) decisions or implementation (on-the-ground) decisions. To help delineate between the two types of decisions, they are outlined differently throughout this Chapter. The Planning Decisions are highlighted in **Bold Font** and the Implementation Decisions are shown in *Italics*. These font styles are only meant to help the reader decipher between the types of decisions stated within this Chapter.

Section 2.2 of this Chapter describes the alternative development process for the PTNM RMP and gives an overview of the focus of each of the three action alternatives considered. Section 2.3 of this Chapter lists the required management from the Omnibus Public Lands Management Act of 2009, Subtitle B-The Prehistoric Trackways National Monument.

For each of the following resources, resource uses, and special designations, the details of goals, objectives, management common to all alternatives, and the proposed management actions and allocations under each alternative are described in Section 2.4 of this Chapter. Management Common to All Alternatives lists management guidance that will follow through all of the proposed alternatives. These detailed, resource-specific descriptions of the management alternatives are followed by an impacts analysis summary table in Section 2.5.

## 2.2 ALTERNATIVE DEVELOPMENT

This Draft RMP/EIS documents the BLM's process of land use planning and environmental analysis for the PTNM. RMPs are broad-scale land management plans that establish desired outcomes (goals and objectives) for management of the public land and identify the management actions and allowable public uses that will achieve those outcomes. An Approved RMP and Record of Decision (ROD) provide the framework for site-specific management decisions and actions. Implementation-level decisions are typically made after the RMP is adopted, but in this RMP some implementation-level decisions are identified and incorporated into the alternatives. An example of an implementation-level decision within this RMP is the Trails and Travel Management Plan (Appendix C), which includes decisions designating routes as motorized or non-motorized. All implementation actions following the Final RMP will be subject to the appropriate level of NEPA review and a review of conformance with the PTNM RMP.

Goals and objectives were developed through the planning process for every applicable resource. Goals describe broad direction and desired conditions for each resource or resource use. The goals remain the same for all alternatives. Goals are derived from the Monument Proclamation, BLM policy guidance, and public scoping input.

Objectives describe more detailed outcomes or “*desired future conditions*” for different components of the resource or resource use that meet the overall goals. Objectives are usually quantifiable and measurable and may have established timeframes for achievement (as appropriate). Some objectives are common to all alternatives while others vary by alternative.

Alternatives must:

- Meet the purpose and need for the RMP (see Chapter 1).
- Be viable and reasonable.
- Be responsive to issues identified in scoping.
- Meet the established planning criteria (see Chapter 1), Federal laws and regulations, and BLM planning policy.

The BLM hosted a public workshop to allow the public time for reviewing preliminary resource management alternatives. This gave the public time to either confirm the range of alternatives or inform the BLM of an alternative or concern that was missed and also allowed the public to reconnect with the planning process.

### **2.2.1 Alternative Themes**

**Alternative A** or the “*No Action Alternative*” represents the continuation of existing management, which is defined by the *Mimbres RMP* (1993) and the legislation designating the Monument, the *Omnibus Public Land Management Act of 2009*. Two RMP amendments also affect management of the Planning Area: *New Mexico Standards for Public Land Health and Guidelines for Livestock Grazing Management* (2001) (NM Standards and Guidelines) and the *Resource Management Plan Amendment for Fire and Fuels Management on Public Land in New Mexico and Texas* (2004) (RMP Amendment for Fire and Fuels Management).

**Alternative B** represents a more restrictive public use approach of the Monument. This approach is designed towards more resource preservation and the most restrictive in human interventions, use of the Monument’s resources would be minimal, and natural processes would continue at the current rate.

- All paleontological resources would be conserved for future scientific research.
- Casual collecting of common invertebrate and paleontological resources would not be allowed.
- Livestock grazing would not be allowed within the Monument.
- The Monument would be closed to all mechanized and motorized vehicles - exceptions to off-highway vehicle (OHV) travel restrictions or closures may be authorized for any military, fire, emergency, or law enforcement vehicles or any vehicle in official use or expressly authorized in writing by the authorized officer.
- Recreational target shooting would be allowed.
- Special Recreation Permits (SRPs) would not be permitted.
- A majority of the education and interpretation program would be off-site.

**Alternative C (Preferred Alternative)** represents a moderate public use and resource management method of the Monument. This alternative allows for protection of the resources while allowing compatible public uses.

- Paleontological resources deemed suitable for scientific research would be preserved and used for scientific research only. Paleontological resources appropriate for interpretation, educational and recreational use would be developed for that use.
- Closed to casual collecting of common invertebrate and plant paleontological resources.
- Limited collecting of common invertebrates would be allowed when in conjunction with a BLM-authorized educational or interpretive activity.
- Allotment management plans would be adjusted to exclude grazing at specific locations such as exclosures around campsites or in areas to protect paleontological resources as deemed necessary.
- Motorized and mechanized travel within the Monument would be limited to designated routes and require a no-fee day-use permit.
- Approximately 5.4 miles of previously designated routes would be closed to motorized and mechanized travel.
- Recreational target shooting would be prohibited
- New routes or trails may be developed by the BLM to enhance visitor experiences and research opportunities.
- Commercial, competitive, and organized group activities would be managed through the SRP process. OHV SRPs would have additional restrictions.
- Interpretation and education would be enhanced on-site and off-site including an on-site visitor contact station.
- Facilitated tours and self-guided interpretive activities would be developed.

**Alternative D** represents a maximum use approach to management of the Monument and the widest range of public uses of the resources while still following the constraints of the designating Legislation.

- Localities deemed suitable for scientific research would be preserved and used for scientific research only. Localities appropriate for interpretation, educational and recreational use would be developed for that use.
- Closed to casual collecting of common invertebrate and plant paleontological resources.
- Limited collecting of common invertebrates would be allowed when in conjunction with a BLM-authorized educational or interpretive activity.
- Current livestock management would continue in the Monument.
- Approximately 4.0 miles of designated routes would be closed to motorized and mechanized use.
- New motorized and non-motorized routes may be developed by the BLM to enhance visitor experiences and research opportunities.
- Competitive, commercial, and organized group activities would be managed through the SRP system. OHV SRPs would have additional restrictions.
- Recreational target shooting would be prohibited
- Interpretation and education would be developed for the Monument both on-site and off-site as would an on-site visitor center.
- Facilitated tours and self-guided interpretive activities would be developed along with an interpretive motorized tour route.

## **2.2.2 Alternatives Considered but Not Analyzed in Detail**

### **2.2.2.1 Community Pit #1**

The adjacent Community Pit #1 has been an issue of management concern. It has been proposed by the public during scoping for consideration to be included into the Monument boundary and analyzed in this RMP. However, Community Pit #1 is not within the Monument boundary and is therefore outside the Planning Area for this RMP. This RMP cannot make decisions for land outside the Planning Area. In order to increase or change the acreage included within the Monument, the Secretary of the Interior or President must make the designation. This action cannot be accomplished through the RMP process.

The Community Pit #1 is closed to public access due to safety concerns. An environmental assessment (EA) was completed in 2010 in regards to reclamation of the Community Pit. While this area may be valuable in the future as an adjacent feature to the Monument, it is currently not within the Monument; therefore, it is not feasible to be carried forward for analysis as an alternative.

### **2.2.2.2 Target Shooting Allowed Within a Designated Area of Monument**

In order to evaluate the safety risk of allowing recreational target shooting and proactively inviting researchers and tourists to the Monument, the BLM applied a ½-mile buffer (consistent with Appendix G) around documented paleontological localities in the Monument. This GIS analysis determined if any areas within the Monument are outside of the safety buffer. Map 4-1 reveals that the safety buffer zones associated with protection of public access to paleontological sites incorporates 93 percent of the Monument. Approximately 356 acres, or 7 percent, of the Monument near the southern boundary lies outside the ½-mile buffer zones associated with paleontological sites. (In conformance with the Paleontological Resources Protection Act, paleontological sites are not displayed on the associated maps.) Access to this side of the Monument is very limited, which leaves these 356 acres obscured from most of the public due to the lack of access roads. There are no distinct physical boundaries for the 356 acres. From a management perspective, allowing recreational target shooting within these 356 acres would be difficult since it would be hard to sign the area and enforce the boundary; therefore, it is not feasible to carry this alternative forward for analysis.

## **2.3 LEGISLATION MANAGEMENT REQUIREMENTS (ALL ALTERNATIVES)**

- The Secretary shall manage the Monument in a manner that conserves, protects, and enhances the resources and values of the Monument.
- Provide for public interpretation of, and education and scientific research on, the paleontological resources of the Monument, with priority given to exhibiting and curating the resources in Doña Ana County, New Mexico.
- Enter into cooperative management agreements or other instruments with interested parties or agencies, as appropriate, to coordinate and collaborate management of the Monument.
- Continue to manage that portion of the Robledo Mountains Wilderness Study Area (WSA) within the Monument according to BLM's *Interim Management Policy for Lands under Wilderness Review* until such time that Congress designates it as a Wilderness Area or releases it from further consideration.

- Continue to manage that portion of the Robledo Mountains Area of Critical Environmental Concern (ACEC) within the Monument as an ACEC.
- Subject to valid existing rights, close the Monument to entry, appropriation, or disposal under the public land laws.
- Land use authorizations may be permitted to facilitate the management of the Monument and to meet the intent of the enabling Legislation. The Secretary shall only allow uses of the Monument that the Secretary determines would further the purposes for which the Monument has been established.
- Subject to valid existing rights, close the Monument to location, entry, and patent under the mining laws; and the operation of the mineral leasing laws, geothermal leasing laws, and minerals materials laws.
- Manage any land or interest in land that is acquired by the United States for inclusion in the Monument after the date of enactment of this Act in the same manner and degree as herein described for the rest of the Monument.
- Except as needed for administrative purposes or to respond to an emergency, the use of motorized vehicles in the Monument shall be allowed only on roads and trails designated for use by motorized vehicles.

## 2.4 RESOURCE OR RESOURCE USE MANAGEMENT ALTERNATIVES

### 2.4.1 PALEONTOLOGICAL RESOURCES

GOAL 1: To conserve, protect and enhance the unique and nationally important paleontological resources and values contained in the PTNM.			
OBJECTIVE 1: Protect and enhance paleontological resources by ongoing research and documentation, which establishes the scientific, educational, or recreational merit of the localities.			
MANAGEMENT COMMON TO ALL ALTERNATIVES:			
<ul style="list-style-type: none"> <li>• The BLM would continue to use information collected from work performed under existing and new paleontological permits to evaluate the importance of specific sites in the Monument.</li> <li>• Paleontological resources collected under a research permit would be stored in Federally-approved repositories as government property, for ongoing and future research and used in exhibits. Paleontological collection permits would be issued with consideration of protecting the integrity of site from which it is being collected, the protection of the resources, and the value of the scientific research or educational aspect for which it would be collected.</li> <li>• The BLM would continue to allow for focused permitted research or collecting in response to approved research proposals or management needs.</li> <li>• The BLM would use the criteria for determining which localities are suitable for scientific research or interpretation, education, and recreation in accordance with the Omnibus Public Land Management Act of 2009-Paleontological Resources Preservation (16 USC 470aaa et seq.). This criteria is as stated below : <ul style="list-style-type: none"> <li>○ Furthers paleontological knowledge or public education [16 USC: 470aaa-3(b)(2)]</li> <li>○ Provides additional information about the history of life on earth [16 USC 470aaa(4)]</li> <li>○ Increases public awareness about the significance of paleontological resources [16 USC 470aaa-2]</li> <li>○ Promotes the scientific and educational use of paleontological resources [16 USC 470aaa-1(a)]</li> <li>○ Will not threaten significant natural or cultural resources [16 USC 470aaa-3(b)(4)]</li> <li>○ Will not create risk of harm to, or theft or destruction of, the paleontological resources or the locality [16 USC 470aaa-8(3)]</li> </ul> </li> <li>• Under Sec. 2104(g) (3) at 123 Stat. 1099, the PTNM has been withdrawn from the operation of the mineral materials laws. Therefore, free-use of petrified wood without a permit is no longer allowed.</li> </ul>			
OBJECTIVE 2: Enhance the knowledge and protection of the paleontological resources located within the Monument through scientists and/or an education and interpretation program.			
ALTERNATIVE A	ALTERNATIVE B	ALTERNATIVE C	ALTERNATIVE D
Continue to allow casual collecting of common invertebrates and plant paleontological resources throughout the Monument.	<p>Closed to casual collecting of common invertebrate and plant paleontological resources. [16 USC 470aaa-3(e) at 123 Stat. 1174]</p> <p>In addition, the collecting of petrified wood for scientific, research, or museum display purposes would be allowed.</p>	<p>Closed to casual collecting of common invertebrate and plant paleontological resources. [16 USC 470aaa-3(e) at 123 Stat. 1174]</p> <p>Limited collecting of common invertebrate paleontological resources without a permit would be allowed only in conjunction with BLM approved interpretive or educational activities and programs. Amounts collected would not exceed 5 of any one variety of invertebrate fossil or 2 pounds per person.</p>	

		<p><b>Use of small hand tools would not be allowed.</b></p> <p><b>In addition, the collecting of petrified wood for scientific, research, or museum display purposes would be allowed.</b></p>
<b>Continue with current BLM management prescriptions.</b>	<b>Conserve all paleontological resources localities for on-going and future scientific research.</b>	<p><b>Localities deemed suitable for scientific research would be preserved and used for scientific research only.</b></p> <p><b>Localities appropriate for interpretation, educational and recreational use would be developed for that use.</b></p>

## 2.4.2 INTERPRETATION AND EDUCATION

GOAL 1: Provide interpretive and educational opportunities.			
OBJECTIVE 1: Partner with organizations (i.e. museums, research and academic institutions) on local and National levels to assist the BLM in providing educational and interpretive opportunities to the public within the Monument.			
MANAGEMENT COMMON TO ALL ALTERNATIVES: <ul style="list-style-type: none"><li>• <i>Continue BLM and partner-led interpretive tours to the Discovery site and other appropriate sites.</i></li><li>• <i>Develop interpretative materials for programs and events.</i></li></ul>			
ALTERNATIVE A	ALTERNATIVE B	ALTERNATIVE C	ALTERNATIVE D
No management actions planned.	<i>Develop interpretive materials on paleontological and other natural resources such as wayside exhibits, brochures and smart phone applications to support self-guided interpretive activities.</i>		
No management actions planned.	<i>Develop interpretive programs on paleontological and other natural resources for ranger or docent-led field tours of the PTNM for school groups and for public and civic groups.</i>		
OBJECTIVE 2: Develop interpretive trails and visitor facilities			
ALTERNATIVE A	ALTERNATIVE B	ALTERNATIVE C	ALTERNATIVE D
No management actions planned.	<i>Minimal directional and informational signs would be installed at established routes.</i>	<i>Develop pedestrian trails with orientation kiosks (with or without brochures) and wayside exhibits interpreting the Monument’s resources in place. This would be based on the activity level plan from the Recreation and Visitor Services management actions.</i>	
		<i>Develop exhibits for on-site interpretation at a visitor contact station(s) and other destinations. This would be based on the activity level plan from the Recreation and Visitor Services management actions. A Visitor Contact Station is a minimal facility that provides a single point of contact for BLM staff/volunteers to be present and available to interact with the public regarding the resources and uses of the Monument. It does not</i>	<i>Develop interpretive and educational materials and programs for an on-site visitor center, and other destinations. This would be based on the activity level plan from the Recreation and Visitor Services management actions. A Visitor Center is considered a larger facility that provides a location for the visiting public to enjoy the full range of opportunities not possible in a Visitor Contact Station. It would potentially provide the full range of amenities such as indoor</i>



		<i>necessarily provide the full range of amenities such as indoor restrooms, or in-depth climate controlled educational exhibits and paleontological specimen displays. It simply is a building, or possibly a shade shelter, where public can expect to find information about the Monument, safety guidance, and information.</i>	<i>restrooms, in-depth climate controlled educational exhibits, and paleontological specimen displays.</i>
		<i>No management action planned.</i>	<i>BLM would prepare an activity and site development plan to explore opportunities in developing a motorized tour route with interpretive materials designed for paleontological and other natural resources to support such a tour. Tour can be self-guided or led by partner groups under a SRP, as appropriate.</i>
OBJECTIVE 3: Partner with organizations (i.e. museums, research and academic institutions) on local and National levels to assist the BLM in providing educational and interpretive opportunities to the public outside the Monument.			
MANAGEMENT COMMON TO ALL ALTERNATIVES:			
<ul style="list-style-type: none"><li>• <i>Develop a K-12 paleontological curriculum, in partnership with local school districts, in accordance with State/National standards.</i></li><li>• <i>Develop paleontological and other natural resources interpretive materials for websites.</i></li><li>• <i>Develop and deliver paleontological and other natural resource interpretive and educational programs to school and civic groups.</i></li><li>• <i>Support the development of paleontological exhibits for venues in Doña Ana County and beyond.</i></li></ul>			

### 2.4.3 RECREATION AND VISITOR SERVICES

#### GOAL 1: Identify the Monument as a Recreation Management Area (RMA).

##### OBJECTIVE 1A:

- Designate the Monument as an Extensive Recreation Management Area (ERMA) to support and sustain the principal recreation activities within the Monument commensurate with the conservation, protection, and enhancement of paleontological, scientific, educational, scenic resources and values.
- Facilitate the visitor's ability to explore the natural resources while protecting the integrity of the education and scientific values of the resources.

ALTERNATIVE A	ALTERNATIVE B	ALTERNATIVE C	ALTERNATIVE D
<p><b>Carry forward 5,280 acres as dispersed recreation as managed under the Mimbres RMP (See Map 2-1).</b></p>	<p><b>Designate 5,280 Acres as ERMA (see Map 2-2).</b></p> <p><u>Objective</u>- Self-directed recreation, manage to provide visitor safety and minimize user conflicts. Install minimal directional and informational signs.</p> <p><u>Activities</u>- Hiking, horseback riding, picnicking, hunting, sightseeing.</p> <p><u>Experiences</u>- Developing outdoor recreational skills, spending time with one's self or in smaller groups, enjoying nature/natural landscapes/paleontological resources, physical rest, escape personal/social pressure.</p>	<p><b>Designate 5,280 Acres as ERMA (see Map 2-3).</b></p> <p><u>Objective</u>- More directed recreation, manage to provide visitor safety and minimize user conflicts. Install minimal directional and informational signs. Install basic improvements necessary to reduce impacts from recreation activities and to assist in the visitors' experiences in the Monument.</p> <p><u>Activities</u>- OHV use, mountain biking, hiking, horseback riding, picnicking, camping, hunting, and sightseeing.</p> <p><u>Experiences</u>- Developing outdoor recreational skills, spending time with family and friends, enjoying nature/natural landscapes/paleontological resources, physical rest, escape personal/social pressure.</p>	<p><b>Designate 5,280 Acres as ERMA (see Map 2-4).</b></p> <p><u>Objective</u>- Directed recreation, manage to provide visitor safety and minimize user conflicts. Install improvements necessary to reduce impacts from recreation activities and to guide the visitors' experiences in the Monument.</p> <p><u>Activities</u>- OHV use, mountain biking, hiking, horseback riding, picnicking, camping, hunting, and sightseeing.</p> <p><u>Experiences</u>- Developing outdoor recreational skills, spending time with family and friends, enjoying nature/natural landscapes/paleontological resources, physical rest, escape personal/social pressure.</p>

	<p><u>Benefits-</u></p> <p><u>Personal-</u> Improved physical and mental health, improved skill for outdoor enjoyment, improved awareness of public and private lands, more outdoor oriented.</p> <p><u>Community/Social-</u> Pride in one's community and heritage, self-renewal leading to healthier relations and sense of community.</p> <p><u>Environmental-</u> Increased awareness and protection of distinctive natural and paleontological and landscape features, reduce negative impacts such as litter, vegetative trampling.</p>	<p><u>Benefits-</u></p> <p><u>Personal-</u> Improved physical and mental health, improved skill for outdoor enjoyment, improved relationships with family and friends, improved awareness of public and private lands, more outdoor oriented.</p> <p><u>Community/Social-</u> Self renewal, pride in one's community and heritage, greater family bonding.</p> <p><u>Environmental-</u> Increased awareness and protection of distinctive natural and paleontological and landscape features, reduce negative impacts such as litter, vegetative trampling.</p>	<p><u>Benefits-</u></p> <p><u>Personal-</u> Improved physical and mental health, improved skill for outdoor enjoyment, improved relationships with family and friends, improved awareness of public and private lands, more outdoor oriented.</p> <p><u>Community/Social-</u> Self renewal, pride in one's community and heritage, greater family bonding.</p> <p><u>Environmental-</u> Increased awareness and protection of distinctive natural and paleontological and landscape features, reduce negative impacts such as litter, vegetative trampling.</p>
GOAL 2: Plan recreational opportunities in order to conserve, protect, and enhance the unique and nationally important paleontological, scientific, educational, scenic and recreational resources and values of the Monument.			
OBJECTIVE 2A: Manage approximately 4,480 acres for front-country public visitation. Manage approximately 800 acres of the Robledo Mountains WSA for primitive visitation classification.			
<p>MANAGEMENT COMMON TO ALL ALTERNATIVES:</p> <ul style="list-style-type: none"> <li>• <b>Recreation opportunities within the Robledo Mountains WSA portion of the Monument would remain primitive with no motorized or mechanized vehicle traffic in order to preserve the wilderness characteristics. The WSA would be managed in accordance with the <i>Interim Management Policy and Guidelines for Lands under Wilderness Review</i>.</b></li> <li>• <b>With the exception of nominal improvements such as visitor and trail signage, no capital improvement projects would be authorized until BLM acquires legal access easements to the Monument.</b></li> </ul>			

ALTERNATIVE A	ALTERNATIVE B	ALTERNATIVE C	ALTERNATIVE D
Dispersed camping would be allowed.	Camping and campfires would not be allowed per Supplementary Rules, 43 CFR 8365. 1-6.	<p><b>Dispersed camping would be allowed, unless resource damage is demonstrated.</b></p> <p><i>In order to deter resource damage, the BLM would sign sensitive areas as “no camping”, diminish evidence of inappropriate camping and strive to educate visitors to use Leave No Trace techniques. However, if a need for a campground is demonstrated through monitored resource damage or recreational use conflicts, a primitive campground and designated camping areas would be established within or in adjacent lands to the Monument. Monitoring criteria that would establish the need for a primitive campground include: campsites and fires near or on sensitive paleontological sites, large campsites damaging vegetation and/or game trails, camping on routes, etc. If a primitive campground is established, campfires would be limited to designated campsites with campfire rings.</i></p>	<p><b>Camping would be allowed in designated areas.</b> <i>In order to deter resource damage, the BLM would sign sensitive areas as ‘no camping’, diminish evidence of inappropriate camping and strive to educate visitors to use Leave No Trace techniques. If a need for a more developed campground is demonstrated through monitored resource damage or recreational use conflicts and a primitive campground is not shown to be sufficient, a developed campground along with designated primitive camping areas would be established within or in adjacent lands to the Monument. Some of the trigger points that would be monitored to determine the need for a developed campground include: the need to manage human waste and trash, reduce impacts from high use camping areas, the need to manage and provide for visitor parking, etc. If a campground is established, campfires would be limited to designated campsites with campfire rings.</i></p>
No management actions planned.	<i>Minimal directional and informational signs would be installed at established routes.</i>	<p><i>BLM would prepare an activity and site development plan to explore opportunities in locating appropriate sites to develop visitor facilities. This plan would include possibilities to install, develop, and maintain toilets, shade shelters, information kiosks, trail markers, and picnic sites.</i></p>	

No management actions planned.	<i>BLM would prepare an activity and site development plan to explore opportunities in locating an appropriate site to install, staff, and maintain a Visitor Contact Station within or adjacent to PTNM to house interpretive exhibits and to use for interpretive programs (multi-purpose use).</i>	<i>BLM would prepare an activity and site development plan to explore opportunities in locating an appropriate site to build, staff, and maintain a visitor center within or adjacent to PTNM housing specimens and interpretive exhibits.</i>	
No management actions planned.	<i>BLM would prepare an activity plan to identify opportunities for a trail system for various recreational opportunities (bike, OHV, hiking, etc.).</i>		
OBJECTIVE 2B: Manage recreation in a safe and reasonable manner for multiple recreational uses, while protecting and enhancing the Monument’s paleontological resources, and with consideration and emphasis on Leave No Trace principles.			
MANAGEMENT COMMON TO ALL ALTERNATIVES:  Under Sec. 2104(g) (3) at 123 Stat. 1099, the PTNM has been withdrawn from the operation of the mineral materials laws. Therefore, free-use of petrified wood without a permit is no longer allowed.			
ALTERNATIVE A	ALTERNATIVE B	ALTERNATIVE C	ALTERNATIVE D
Except as provided under current law, regulation and policy, there would be no restrictions on the discharge of firearms (see Map 2-1 and 2-2).		Recreational target shooting would be prohibited (see Maps 2-3 and 2-4).	
Commercial, competitive and organized group activities would be authorized per 43 CFR Part 2930, Special Recreation Permits	The PTNM would be CLOSED to Special Recreation Permits.	BLM would authorize commercial, competitive, and organized group activities on a discretionary, case-by-case basis per 43 CFR Part 2930, Special Recreation Permits, and in compliance with NEPA.  SRPs for OHV events would be limited by the following requirements: <ul style="list-style-type: none"><li>• No more than 3 permitted OHV events per year (first-come, first-served, no multiple year events permits would be considered);</li><li>• No permits would be issued for OHV events lasting for more than 4 consecutive days.</li><li>• No more frequently than 1 every 3 months;</li><li>• No more than 250 vehicles per event;</li><li>• No more than 20 vehicles per “run”;</li><li>• No more than 2 “runs” per trail route would be authorized during each event;</li><li>• Only Registered Event vehicles (including event support and BLM staff vehicles) would be allowed on the routes, during the event.</li></ul>	

<p><b>Continue to allow casual collecting of rock and mineral resources throughout the Monument.</b></p> <p>As a reminder, free-use of petrified wood without a permit is no longer allowed.</p>	<p><b>Closed to casual collecting of rock and mineral resources.</b></p> <p>As a reminder, free-use of petrified wood without a permit is no longer allowed.</p>	<p><b>Closed to casual collecting of rock and mineral resources.</b></p> <p>As a reminder, free-use of petrified wood without a permit is no longer allowed.</p> <p><b>Only in conjunction with BLM authorized interpretive or educational activities and programs, limited collecting of rock and mineral resources would be allowed. Use of small hand tools would not be allowed.</b></p>	<p><b>Allow casual collecting of rock and mineral resources throughout the Monument.</b></p> <p>As a reminder, free-use of petrified wood without a permit is no longer allowed.</p>
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## 2.4.4 TRAILS AND TRAVEL MANAGEMENT

**GOAL 1:** Balance the need for public access to and across public land for the enjoyment, use and protection of sensitive natural, cultural, and historic resource values by developing a Comprehensive Trails and Travel Management (CTTM) plan for the Monument and to thus identify and designate routes within the Monument according to type and condition of use, i.e., motorized routes, equestrian trails, seasonal use, etc.

**OBJECTIVE 1:** Designate and manage areas in the Monument to the appropriate level of motorized and mechanized vehicle use. Areas must be classified as *open*, *limited*, or *closed* for motorized travel activities. Criteria for open, limited, and closed area designations are established in 43 CFR 8340.0-5(f), (g) and (h), respectively.

### MANAGEMENT COMMON TO ALL ALTERNATIVES:

- The Robledo Mountains WSA would be managed in accordance with the *Interim Management Policy and Guidelines for Lands under Wilderness Review*, which states motorized or mechanized vehicle travel in WSAs is limited to only those ways that existed at the time the area became a WSA. The portion of the Robledo Mountains WSA located within the Monument would be **CLOSED** to motorized and mechanized use in all alternatives.
- Exceptions to OHV travel restrictions or closures may be authorized for any military, fire, emergency, or law enforcement vehicle while being used for emergency purposes; and any vehicle in official use or expressly authorized in writing by the authorized officer.
- In accordance with 43 CFR §8341.2 where off-road vehicles are causing or would cause considerable adverse effects upon soil, vegetation, wildlife, wildlife habitat, cultural resources, historical resources, threatened or endangered species, wilderness suitability, other authorized uses, or other resources, the affected areas shall be immediately closed to the type(s) of vehicle causing the adverse effect until the adverse effects are eliminated and measures implemented to prevent recurrence.
- Dispersed pedestrian recreation would continue to be allowed.
- The Monument is open to equestrian use.

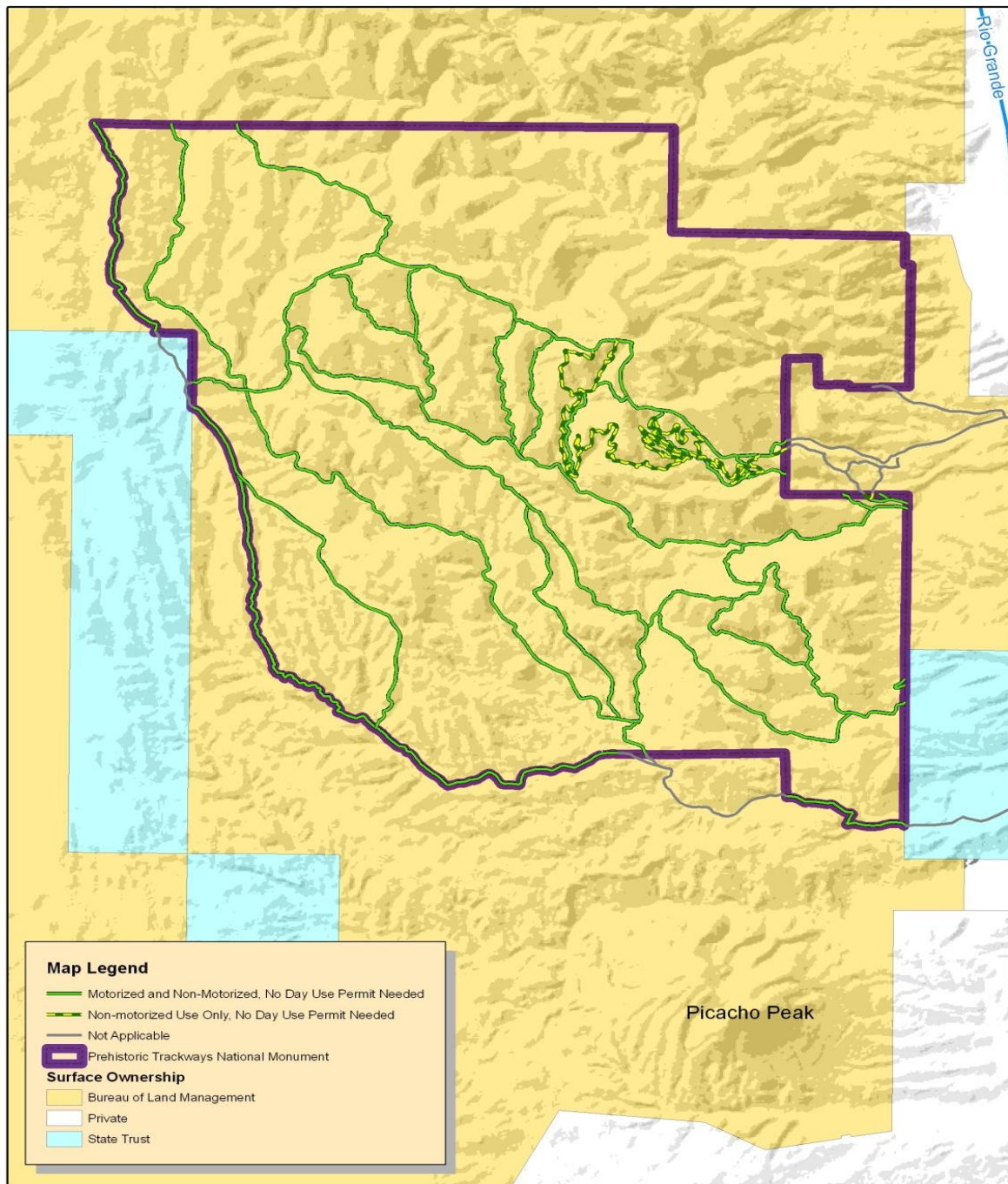
ALTERNATIVE A	ALTERNATIVE B	ALTERNATIVE C	ALTERNATIVE D
<p>Motorized and mechanized travel is <b>LIMITED</b> (5,280 acres) to those routes designated by the Mimbres RMP, Robledo Mountains Off-Highway Vehicle Trails Environmental Assessment (EA) and Implementation Plan, and the Doña Ana County Mountain Bike Trails (SST Trail).</p> <p><i>A total of 37.6 miles of routes would be available for motorized or mechanized use.</i></p>	<p>The PTNM would be <b>CLOSED</b> (5,280 acres) to recreational use by motorized and mechanized vehicles via Supplementary Rules (43 CFR 8365.1-6).</p> <p><i>A total of 0 miles of routes would be available for motorized or mechanized use.</i></p>	<p>Casual recreational use by motorized and mechanized vehicles would be <b>LIMITED</b> (5,280 acres) to designated routes. Recreational use by motorized and mechanized vehicles (not associated with a permitted event) would require a <b>no-fee Day Use Pass</b>. These passes, along with maps and resource protection information, would be available online and at the local BLM office.</p> <p><i>A total of 33.2 miles of current routes would be available for motorized or mechanized use.</i></p>	<p>Motorized and mechanized travel would be <b>LIMITED</b> (5,280 acres) to designated routes.</p> <p><i>A total of 33.6 miles of current routes would be available for motorized or mechanized use.</i></p>

<p><i>Approximately 32.3 miles of OHV recreational opportunity within the PTNM and are open year round for motorized use. See Map 2-1.</i></p>	<p><i>All routes would be CLOSED to recreational motorized and mechanized use. These trail closures would be implemented to prevent damage from motorized or mechanized vehicle use on the paleontological resources. See Map 2-2.</i></p>	<p><i>The following routes would be closed to motorized and mechanized vehicle use:</i></p> <ul style="list-style-type: none"> <li><i>• Apache Canyon (Tabasco Twister OHV Route) 2.7 miles 100%</i></li> <li><i>• Branson Canyon (Patzcuaro's Revenge OHV Route) 1.8 miles 100%</i></li> <li><i>• Cayenne Crawler 0.4 miles 100%</i></li> </ul> <p><i>A total of 4.9 miles of previously designated OHV routes would be closed to motorized and mechanized vehicle use.</i></p> <p><i>The following route would be closed to any designated use:</i></p> <ul style="list-style-type: none"> <li><i>• Un-named Route 0.5 miles 100%</i></li> </ul> <p><i>This route was originally designated as an OHV route, but was not used as such. Motorized and mechanized use would not be allowed on this previously designated route.</i></p> <p><i>These trail closures would be implemented to prevent damage from motorized or mechanized vehicle use on the paleontological resources. See Map 2-3 and Appendix C for the CTTM.</i></p>	<p><i>The following routes would be closed to motorized and mechanized vehicle use:</i></p> <ul style="list-style-type: none"> <li><i>• Apache Canyon (Tabasco Twister OHV Route ) 2.7 miles 100%</i></li> <li><i>• Branson Canyon (Patzcuaro's Revenge OHV Route ) 0.8 miles 45%</i></li> </ul> <p><i>A total of 3.5 miles of previously designated routes would be closed to motorized and mechanized vehicle use.</i></p> <p><i>Cayenne Crawler would remain open, but would be modified from an uphill only route to a downhill only route. This would allow OHV use on Cayenne Crawler that leads into the remaining open portion of Branson Canyon (Patzcuaro's Revenge OHV Route)</i></p> <p><i>The following route would be closed to any designated use:</i></p> <ul style="list-style-type: none"> <li><i>• Un-named Route 0.5 miles 100%</i></li> </ul> <p><i>This route was originally designated as an OHV route, but was not used as such. Motorized and mechanized use would not be allowed on this previously designated route.</i></p>
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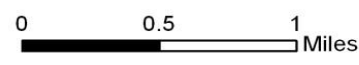


			These trail closures would be implemented to prevent damage from motorized or mechanized vehicle use on the paleontological resources. See Map 2-4 and Appendix C for the CTTM.
<b>The PTNM would be LIMITED to designated routes for recreational use by mechanized vehicles.</b> The SST Mountain Bike Trail is approximately 5.5 miles in length within the Monument, and is open for year-round mechanized and non-motorized use. See Map 2-1.	<b>The PTNM would be CLOSED to recreational use by mechanized vehicles.</b> See Map 2-2.	<i>Same as Alternative A.</i> See Map 2-3.	<i>Same as Alternative A.</i> See Map 2-4.
<b>OBJECTIVE 2A: Maintain and enhance mechanized or motorized access to the Monument.</b>			
<b>ALTERNATIVE A</b>	<b>ALTERNATIVE B</b>	<b>ALTERNATIVE C</b>	<b>ALTERNATIVE D</b>
No management action planned.	Routes would not be maintained or improved.	Designated routes that do not damage sensitive resources could be maintained or improved as necessary to facilitate designated visitor use.	

## Map 2-1 - Trails & Travel Management, Alternative A

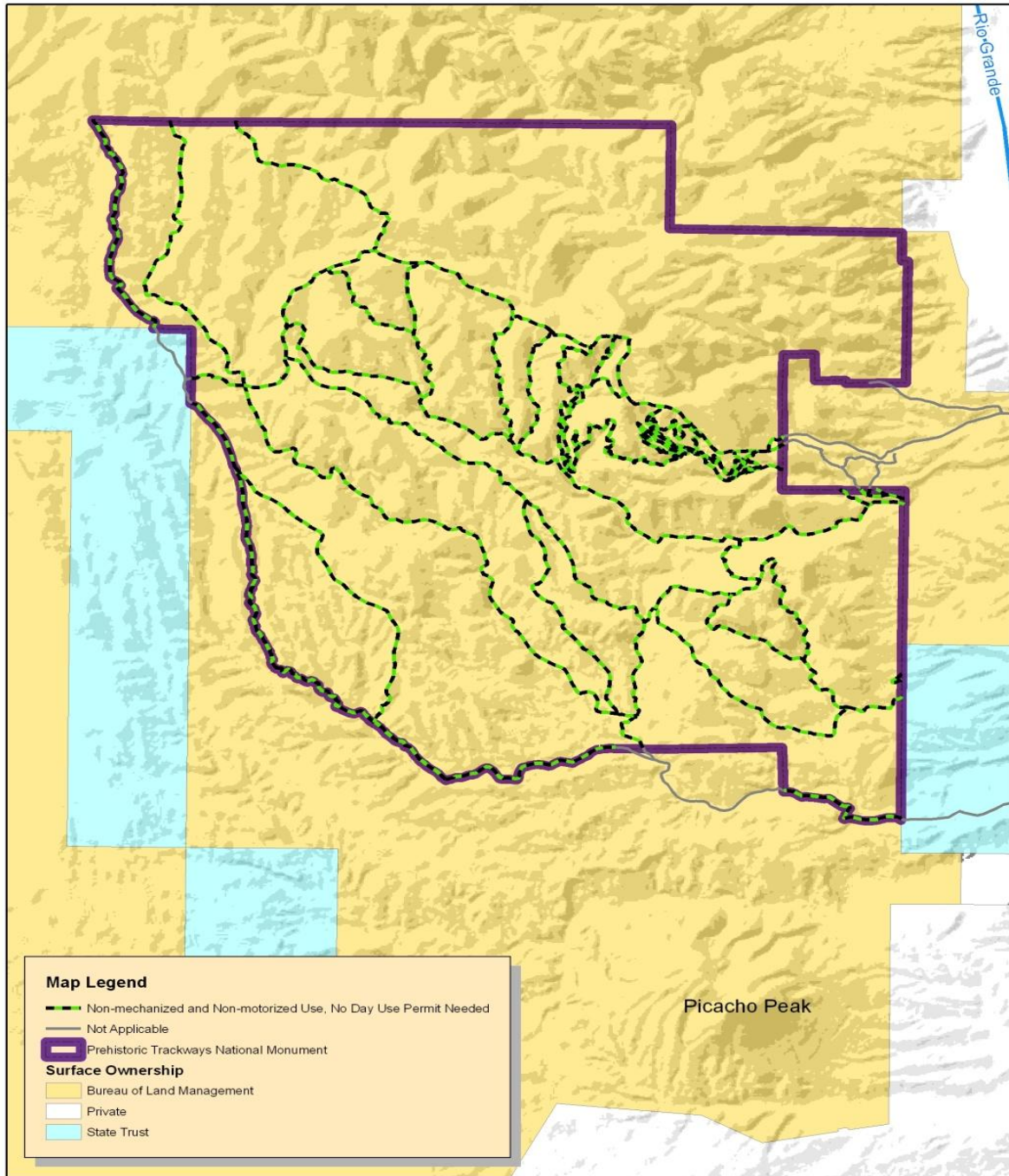


No Warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual use or aggregate use with other data, or for purposes not intended by the BLM. Spatial information may not meet National Map Accuracy Standards. This information is subject to change without notification.



Projection: UTM Zone 13  
Datum: NAD 1983

## Map 2-2 - Trails & Travel Management, Alternative B



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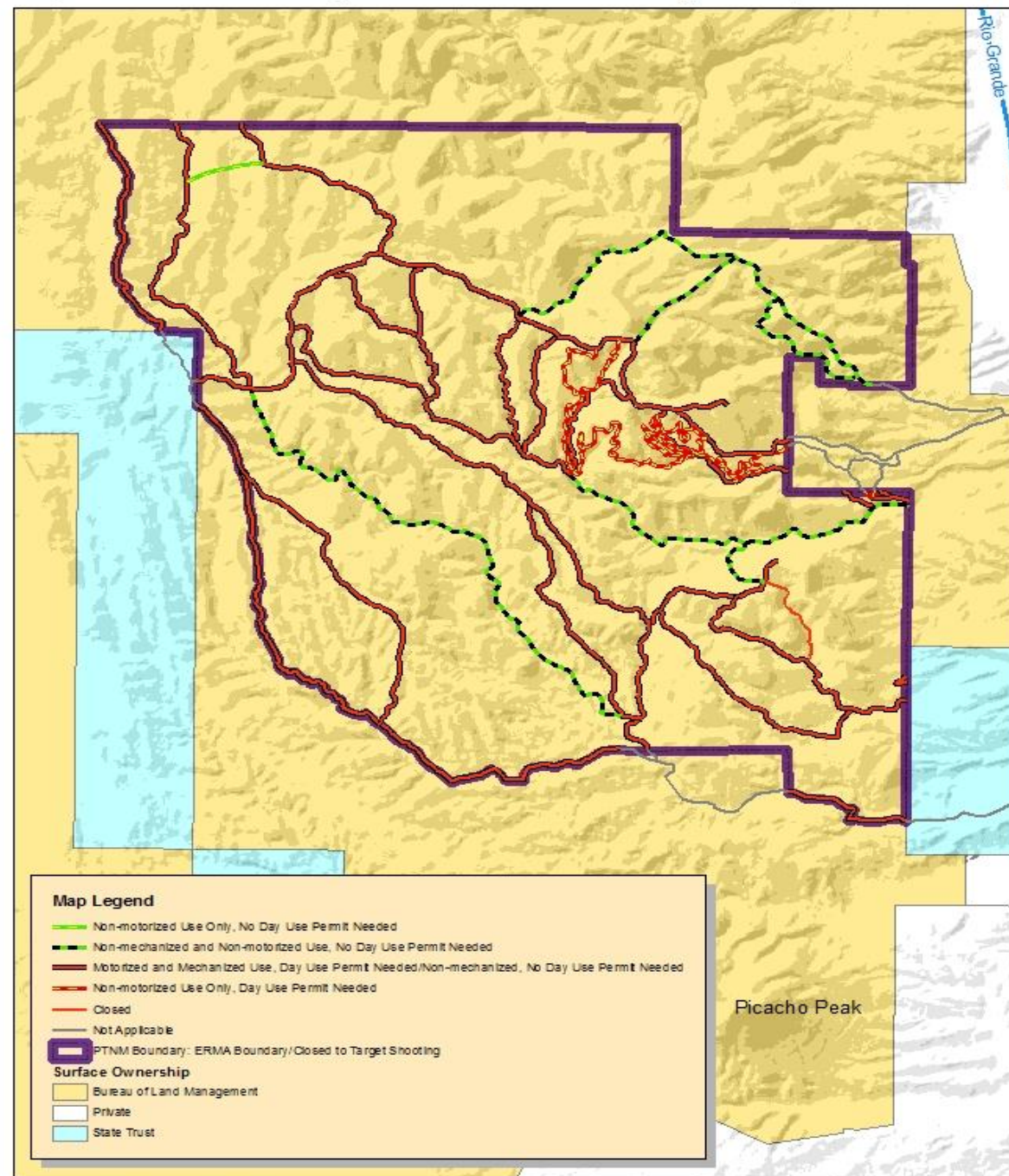


0 0.5 1 Miles

Projection: UTM Zone 13  
Datum: NAD 1983



**Map 2-3 - Recreation, Trails & Travel Management, Alternative C**



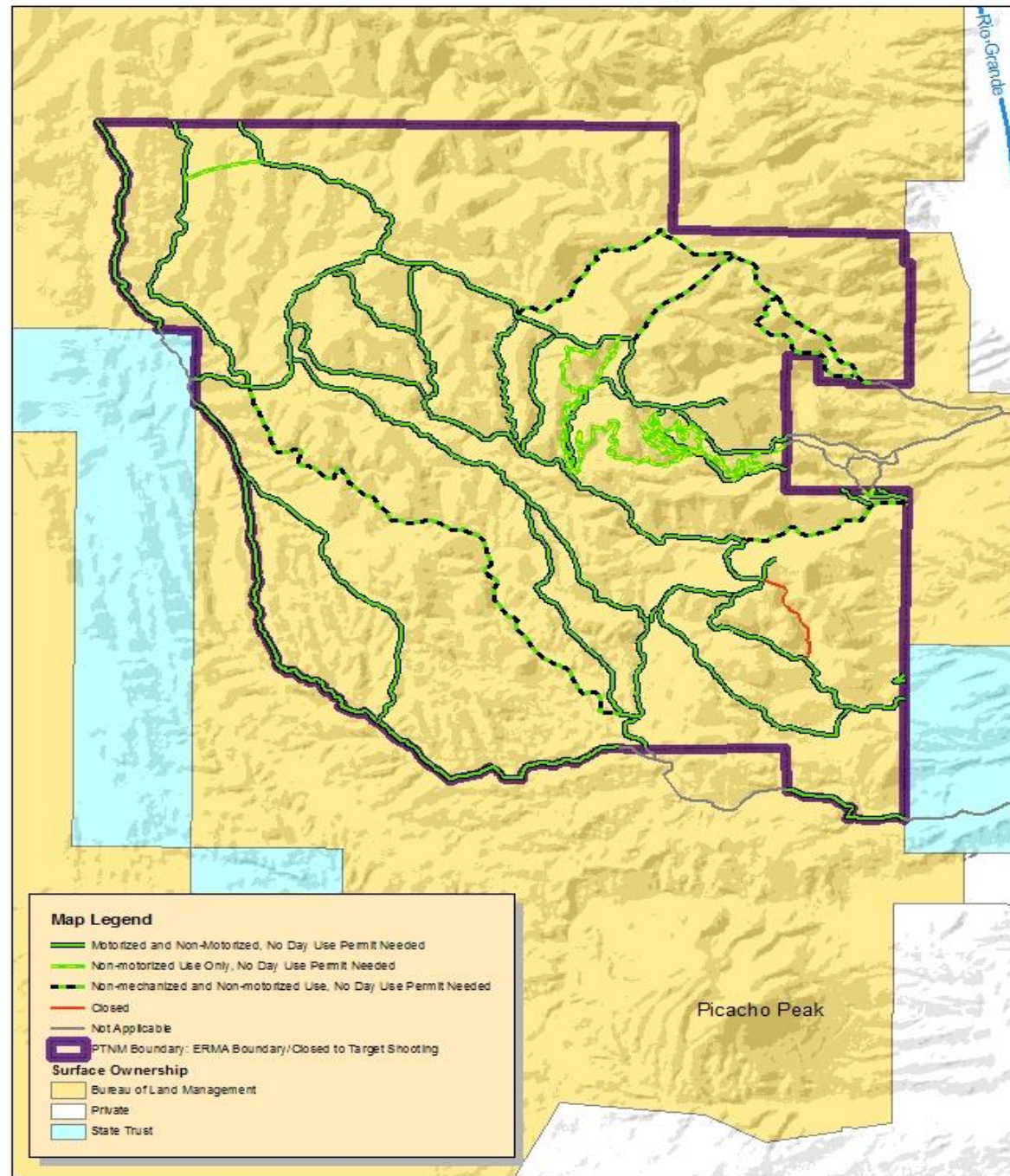
No Warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual use or aggregate use with other data, or for purposes not intended by the BLM. Spatial information may not meet National Map Accuracy Standards. This information is subject to change without notification.



0 0.5 1 Miles

Projection: UTM Zone 13  
Datum: NAD 1983

**Map 2-4 - Recreation, Trails & Travel Management, Alternative D**



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0 0.45 0.9 Miles

Projection: UTM Zone 13  
Datum: NAD 1983



## 2.4.5 AIR RESOURCES

GOAL 1: Manage use to maintain Federal, State and local air quality standards.
OBJECTIVE 1: Manage activities on public land to maintain air quality consistent with the Clean Air Act and FLPMA.
MANAGEMENT COMMON TO ALL ALTERNATIVES: <ul style="list-style-type: none"> <li>• <b>Prevent and reduce air quality impacts from authorized activities on public land by implementing mitigation measures developed on a case-by-case basis. These processes would be applicable to all BLM authorized activities.</b></li> </ul>

## 2.4.6 CULTURAL RESOURCES

GOAL 1: Identify, preserve, and protect significant cultural resources and ensure they are available for use by present and future generations consistent with the BLM cultural resources program and appropriate to the mission of the Monument.			
OBJECTIVE 1A: Recognize potential public and scientific uses of cultural resources within the Monument managing them in such a manner that these values and uses are appropriately protected.			
ALTERNATIVE A	ALTERNATIVE B	ALTERNATIVE C	ALTERNATIVE D
Historic properties, i.e., sites determined eligible for or included on the National Register of Historic Places (NRHP), are allocated to uses subject to management actions. The six use allocations include: (1) scientific use, (2) conservation for future use; (3) traditional use; (4) public use; (5) experimental use; and (6) discharged from management.	Allocate historic properties to either scientific use or discharge from management. The latter are sites that have been determined to be not eligible or no longer eligible for the NRHP, therefore no longer constituting a historic property requiring a management action.		
OBJECTIVE 1B: Protect and preserve in place representative examples of the full complement of cultural resources that may exist within the Monument.			
MANAGEMENT COMMON TO ALL ALTERNATIVES:			
<ul style="list-style-type: none"><li>• Cultural resource inventories would be done in direct response to specific land-use proposals in accordance with Section 106 of the National Historic Preservation Act (NHPA).</li><li>• Should at a later time a Native American entity express concern about a specific place or resource, BLM will consult accordingly.</li></ul>			
GOAL 2: Reduce imminent threats and resolve potential conflicts from natural or human caused deterioration, or potential conflict with other resource uses consistent with BLM cultural resources program and appropriate to the mission of the Monument.			
OBJECTIVE 2: Ensure that proposed land uses avoid inadvertent damage to cultural resources on Federal, State, and non-Federal lands.			

MANAGEMENT COMMON TO ALL ALTERNATIVES:

The BLM would comply with Section 106 of the NHPA through the National Programmatic Agreement and the Protocol Agreement between New Mexico BLM and New Mexico State Historic Preservation Officer, which states:

- BLM Class III inventory would be conducted on areas that would be directly impacted by a surface disturbing project or action.
- Archaeological resources, if found, would be evaluated for their eligibility to the NRHP. Eligible sites (historic properties) would be avoided or impacts would be minimized by project re-design. If that is not possible, then the impacts would be mitigated, normally through the development and implementation of an historic properties treatment plan developed in consultation with the New Mexico State Historic Preservation Officer, tribes, and other consulting parties

#### 2.4.7 LANDS AND REALTY

GOAL 1: Manage the acquisition of lands or interests therein to meet the requirements of the Monument Legislation.

OBJECTIVE 1: Retain all public land within the PTNM in Federal ownership.

MANAGEMENT COMMON TO ALL ALTERNATIVES:

- The designating Legislation Section 2104 (g) states: Federal lands within the PTNM are... “withdrawn from (1) entry, appropriation, or disposal under the public land laws...” Therefore, Federal land is not open to disposal through land sales, State grants, Recreation and Public Purpose Act leases or sales, desert land entries, Indian allotments or commercial or agricultural leases.
- Public land within the PTNM would continue to be classified for retention under Section 7 of the Taylor Grazing Act, as amended (43 U.S.C. 315f).
- If additional lands are added to the Monument at a later date, these lands would be managed in accordance with the management decisions made in this RMP/EIS.

OBJECTIVE 2: Acquire access easements from willing sellers in order to secure administrative and public legal access into the Monument.

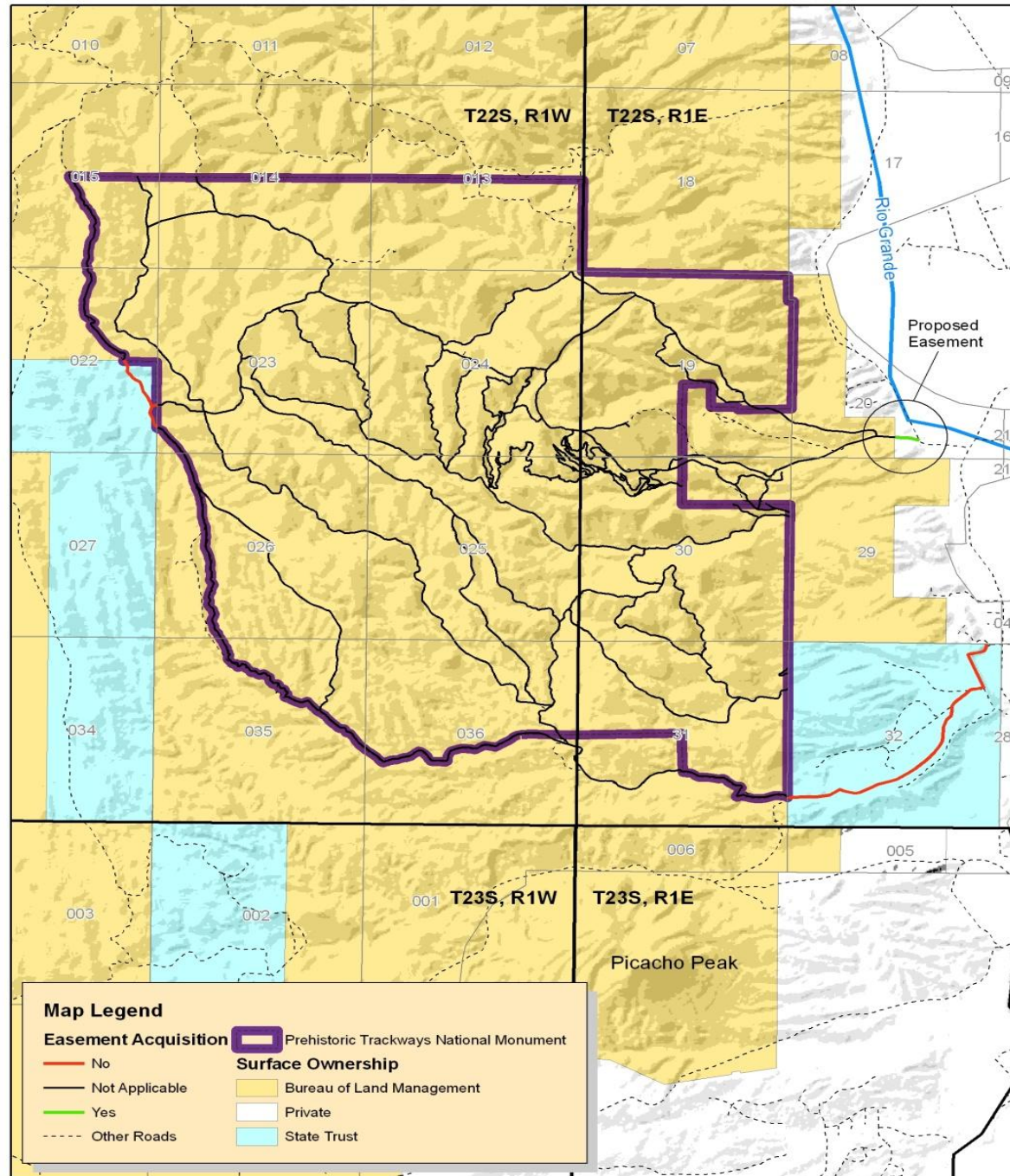
MANAGEMENT COMMON TO ALL ALTERNATIVES:

- Easements would be acquired only from a willing seller.
- The BLM would attempt to acquire an access easement for public use from the private landowner for land located in Section 20, T. 22 S., R. 1 E. Acquisition of easement(s) will be in accordance with the provisions of Section 205 of FLPMA. This decision, which is outside the Planning Area, is continuing guidance from the Mimbres RMP (BLM 1993) that covers this area. See Map 2-5.

ALTERNATIVE A	ALTERNATIVE B	ALTERNATIVE C	ALTERNATIVE D
Continue with current BLM management prescriptions for access acquisition.		<b>Acquire access easements for public use from private property owners and the New Mexico State Land Office across Section 32, T. 22 S., R. 1 E., and Section 22, T. 22 S., R. 1 W.</b> This decision is outside the Planning Area for the PTNM RMP, but it is included in the proposed RMP (BLM TriCounty RMP/EIS) that covers the area surrounding the PTNM. See Map 2-6.	
OBJECTIVE 3: Acquire the mineral estate within the boundaries of the Monument to further protect the overall purposes of the Monument.			
MANAGEMENT COMMON TO ALL ALTERNATIVES:  <b>Non-Federal mineral estate would be acquired only from a willing seller.</b> Acquisition of the mineral estate will be in accordance with the provisions of Section 205 of FLPMA.			
ALTERNATIVE A	ALTERNATIVE B	ALTERNATIVE C	ALTERNATIVE D
No existing acquisition management decisions.	<b>Acquire approximately 640 acres of all non-Federal mineral estate within and adjacent to the Monument in Section 36, T. 23 S., R. 1 W. If additional minerals are added to the Monument at a later date, these minerals will be managed in accordance with the Legislation and management decisions made in this RMP/EIS.</b> See Map 2-7, which depicts the non-Federal minerals that are located within the Monument boundary.		
GOAL 2: Manage rights-of-way and land use authorizations within the Monument to meet the needs of the BLM and the Monument Legislation.			
OBJECTIVE 1: Maintain a right-of-way and land use authorization system to meet resource management needs.			
MANAGEMENT COMMON TO ALL ALTERNATIVES:  <ul style="list-style-type: none"><li>Exclude the Monument from commercial communication site, transmission line, solar, wind, and geothermal energy rights-of-way.</li><li>Allow realty actions such as rights-of-way or land use authorizations within the Monument that are compatible with the values identified in the PTNM, while respecting existing uses. New uses will be in accordance with the provisions of Sections 302 and 501 of FLPMA.</li></ul>			
ALTERNATIVE A	ALTERNATIVE B	ALTERNATIVE C	ALTERNATIVE D
Surface and non-surface disturbing activities would be authorized on a case-by-case basis following NEPA analysis.	Surface disturbing land use activities would not be authorized except for scientific research. Non-surface disturbing activities (for example- non-surface disturbing film permits) could be authorized on a case-by-case basis following NEPA analysis.	Same as Alternative A.	



## Map 2-5 - Access Easement Proposal, Alternatives A & B



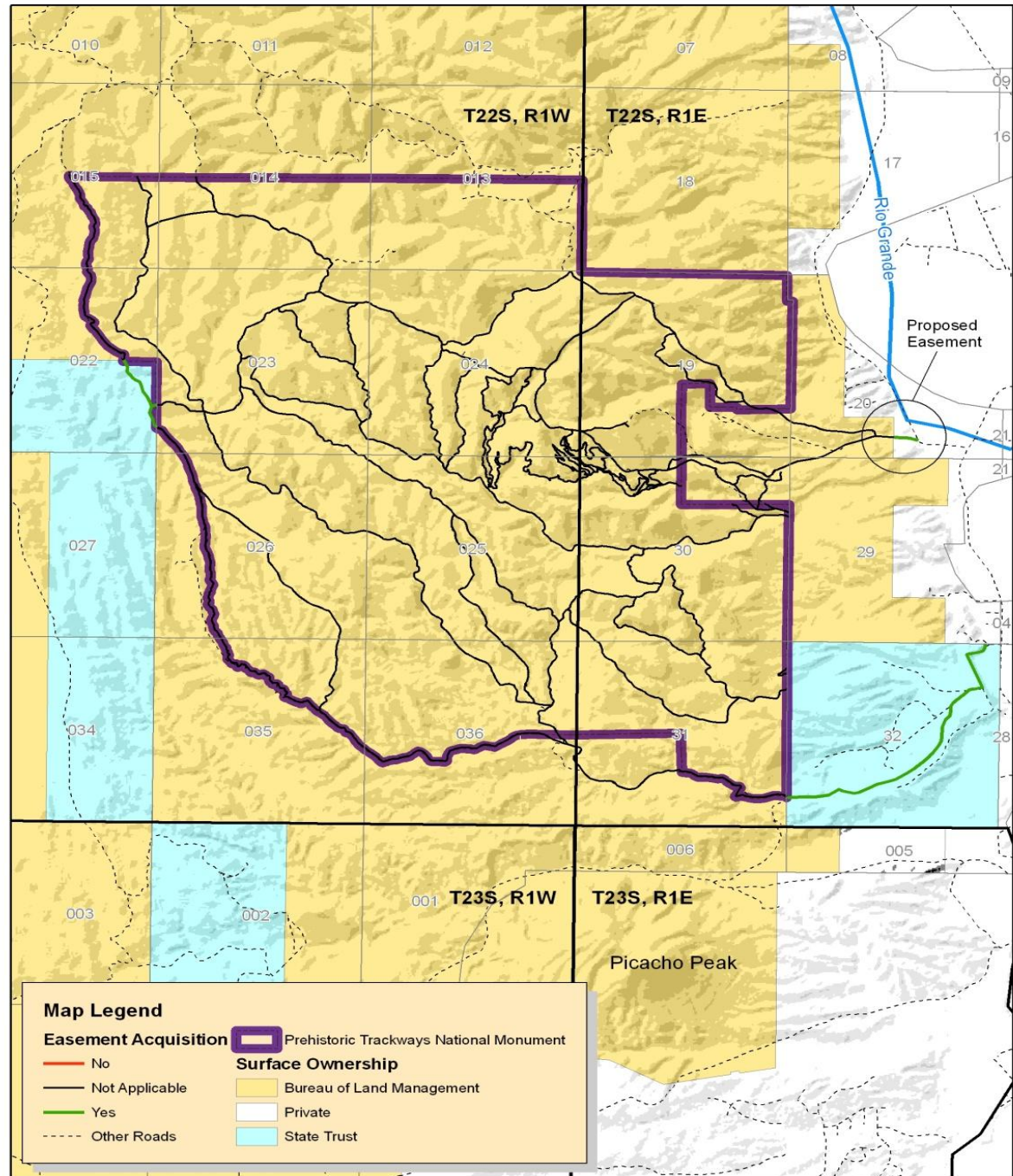
No Warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual use or aggregate use with other data, or for purposes not intended by the BLM. Spatial information may not meet National Map Accuracy Standards. This information is subject to change without notification.



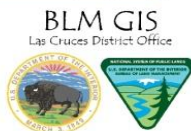
0 0.5 1 Miles

Projection: UTM Zone 13  
Datum: NAD 1983

**Map 2-6 - Access Easement Proposal, Alternatives C & D**



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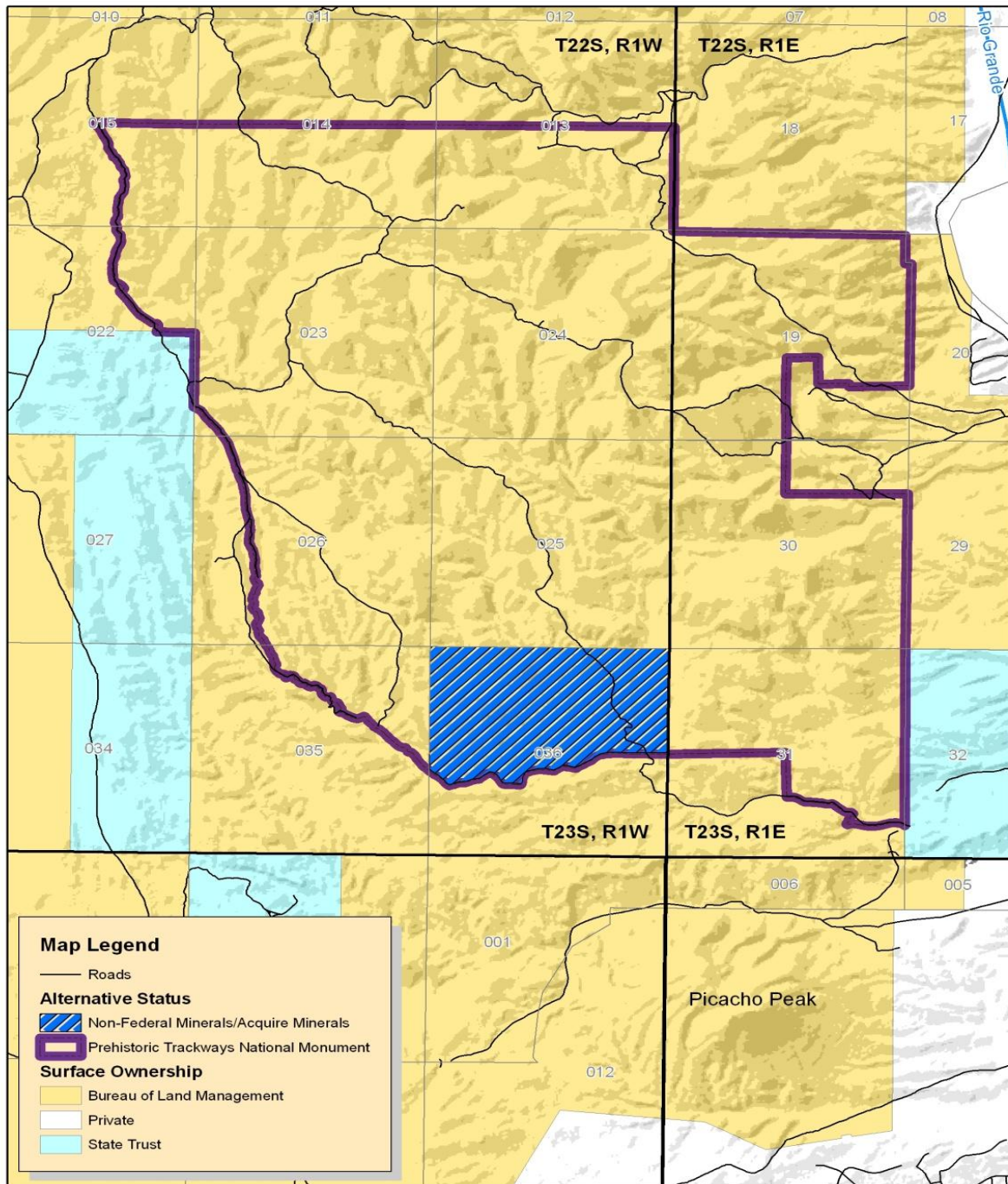


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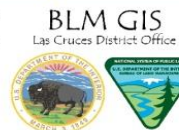
Projection: UTM Zone 13  
Datum: NAD 1983



## Map 2-7 - Minerals Acquisition, Alternatives B, C & D



No Warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual use or aggregate use with other data, or for purposes not intended by the BLM. Spatial information may not meet National Map Accuracy Standards. This information is subject to change without notification.



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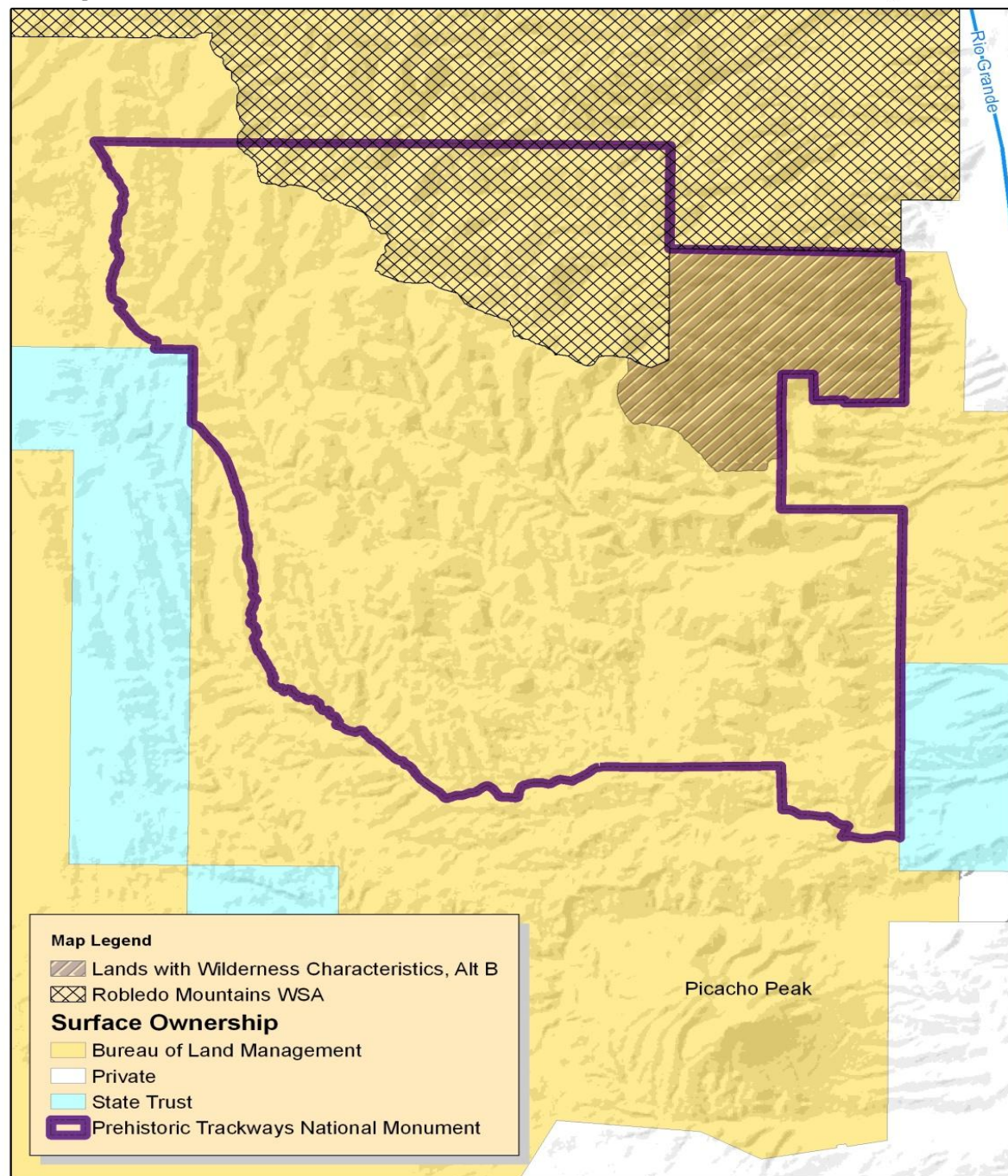
Projection: UTM Zone 13  
Datum: NAD 1983

## 2.4.8 LANDS WITH WILDERNESS CHARACTERISTICS

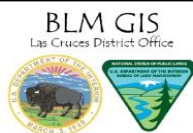
GOAL 1: To identify the desired management for lands with wilderness characteristics.			
OBJECTIVE 1: Manage surface disturbing activities such that the natural quality of lands with wilderness characteristics identified for protection is maintained.			
ALTERNATIVE A	ALTERNATIVE B	ALTERNATIVE C	ALTERNATIVE D
No similar action.	<p><b>Manage the 576 acres (located in T. 22 S., R. 1 E., Sections 19 and 24, see Map 2-8) that is contiguous with the Robledo Mountains WSA to maintain wilderness characteristics.</b></p> <p>Management will follow these prescriptions:</p> <ul style="list-style-type: none"> <li>• Prohibit all surface disturbing activities except those associated with permitted scientific exploration and emergencies.</li> <li>• Manage as an exclusion area for rights-of-way.</li> <li>• Manage as a Visual Resource Management (VRM) Class I.</li> <li>• Close to motorized and mechanized vehicles.</li> <li>• No new trails or interpretation signage will be constructed within the area.</li> </ul>	<p><b>Manage the 253 acres (located in T. 22 S., R. 1 E., Section 19, see Map 2-9) that is contiguous with the Robledo Mountains WSA to maintain wilderness characteristics.</b></p> <p>Management will follow these prescriptions:</p> <ul style="list-style-type: none"> <li>• Prohibit all surface disturbing activities except those associated with permitted scientific exploration and emergencies.</li> <li>• Manage as an exclusion area for rights-of-way.</li> <li>• Manage as a VRM Class I.</li> <li>• Close to motorized and mechanized vehicles.</li> <li>• No new trails or interpretation signage will be constructed within the area</li> </ul> <p><b>The remaining acreage would not be managed to maintain wilderness characteristics.</b></p>	<p><b>Non-WSA land would not be managed to maintain wilderness characteristics within the Monument boundary.</b></p>



**Map 2-8 - Lands with Wilderness Characteristics, Alt B**



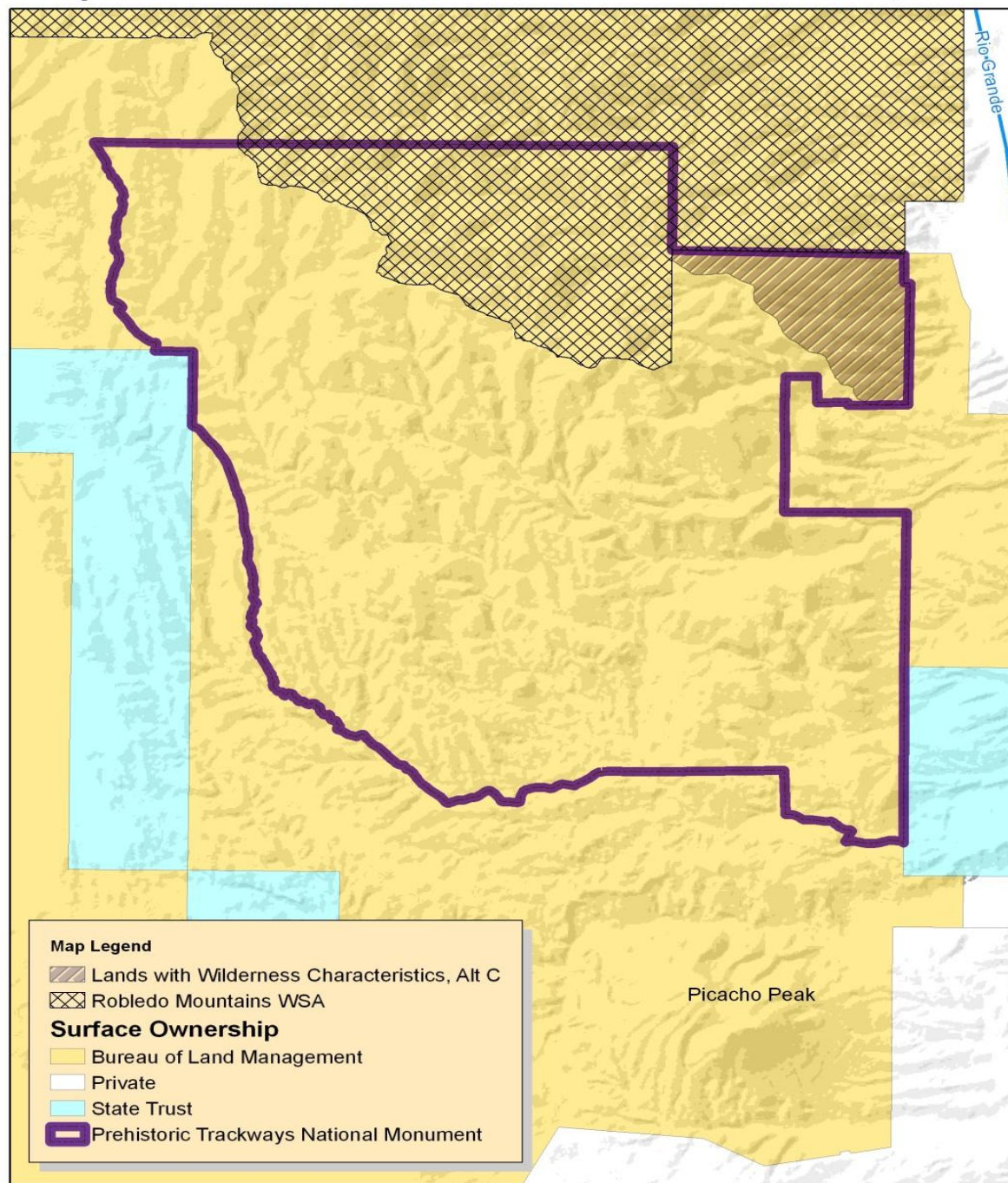
No Warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual use or aggregate use with other data, or for purposes not intended by the BLM. Spatial information may not meet National Map Accuracy Standards. This information is subject to change without notification.



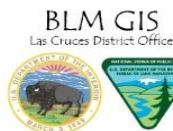
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Projection: UTM Zone 13  
Datum: NAD 1983

# Map 2-9 - Lands with Wilderness Characteristics, Alt C



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Projection: UTM Zone 13  
Datum: NAD 1983



## 2.4.9 LIVESTOCK GRAZING

GOAL 1: Effectively promote a healthy and productive rangeland ecosystem under the principles of multiple-use and sustained yield consistent with the purposes for which the Monument was designated.			
OBJECTIVE 1: Maintain quality and quantity of key forage and browse species for use by livestock and wildlife through continued implementation of appropriate grazing systems and management practices.			
MANAGEMENT COMMON TO ALL ALTERNATIVES:			
<ul style="list-style-type: none"> <li>• The designating Legislation: Section 2104 (h) states “Grazing- The Secretary may allow grazing to continue in any area of the Monument in which grazing is allowed before the date of enactment of this Act, subject to applicable laws (including regulations).”</li> <li>• Manage livestock grazing on public land in conjunction with the <i>New Mexico Standards for Public Land Health and Guidelines for Livestock Grazing Management (BLM 2000)</i>.</li> <li>• Continue monitoring range health and productivity within the National Monument to ensure standards for public land health are being achieved.</li> <li>• Existing range improvements would continue to be protected and maintained.</li> <li>• New range improvements would not be authorized in the Robledo Mountains WSA.</li> </ul>			
ALTERNATIVE A	ALTERNATIVE B	ALTERNATIVE C	ALTERNATIVE D
<p>Grazing for the Picacho Peak Allotment would occur under a deferred rotation system in accordance with the allotment management plan, as amended May 1997.</p> <p>Grazing use would continue to be authorized on the Altamira Allotment.</p>	<p>Grazing would be excluded from the Prehistoric Trackways National Monument.</p>	<p>Adjust the allotment management plan to exclude grazing at specific locations such as exclosures around campsites or in areas to protect paleontological resources when determined necessary.</p> <p>Adjustments could be made to the allotment management plan, in consultation with the permittee, to change grazing systems, number of livestock and season of use as needed.</p>	<p>Grazing would be allowed in all areas of the Monument in accordance with the current allotment management plan.</p> <p>Adjustments could be made to the allotment management plan, in consultation with the permittee, to change grazing systems, number of livestock and season of use as needed.</p>
<p>Existing range improvements would continue to be maintained by the assigned entity for livestock and wildlife use.</p>	<p>Existing range improvements would continue to be protected and maintained by BLM as deemed necessary for wildlife use.</p>	<p>Existing range improvements would continue to be maintained by the assigned entity for livestock and wildlife use.</p>	

<p><i>A benefit-cost analysis would be used to help set improvement priorities on all new rangeland improvements.</i></p> <p><b>Rangeland improvements and vegetation treatments would be implemented to improve or maintain forage production and range condition.</b></p>	<p><i>No new range improvements would be authorized on public land within the PTNM.</i></p>	<p><i>Implement new range improvements as needed within the Monument to facilitate livestock management and minimize conflicts with other uses and management objectives.</i></p>	
<p><b>Grazing treatments would be incorporated into activity plans to meet management objectives and goals established for each individual allotment.</b></p>	<p><b>Forage increases as a result of grassland restoration treatments would be reserved for watershed function.</b></p>	<p><b>Forage increases as a result of grassland restoration treatments would first be reserved to meet the needs for watershed function. Forage in excess of those needs would be allocated to wildlife and livestock with wildlife receiving priority over livestock.</b></p>	<p><b>All forage increases as a result of grassland restoration treatments would be allocated to livestock.</b></p>



#### 2.4.10 RESEARCH MANAGEMENT

GOAL 1: Manage the Monument in order to provide for and allow scientific research while taking into consideration conservation and preservation of the paleontological, scenic, recreational, cultural, and natural resources.

OBJECTIVE 1: Allow research within the Monument in order to increase the knowledge and understanding of the resources.

##### MANAGEMENT COMMON TO ALL ALTERNATIVES:

- **All proposed research projects would be evaluated by the BLM staff, including the Regional Paleontologist for all proposed paleontological research projects. The following items would be considered prior to authorization:**
  - An assessment of whether the proposed research is the appropriate current use of the resource.
  - An assessment of its priority level if there are multiple proposals.
  - An appropriate level of environmental analysis (NEPA).
  - Incorporating project-specific stipulations for resource protection.
  - A final written determination, which would be in the form of an authorization.
- **All contractors, cooperators, partners, volunteers, and permittees conducting or assisting with scientific activities in the Monument must comply with the requirements of the Department of the Interior and the BLM policies on Scientific Integrity, including professional conduct.**
- **The BLM would identify research priorities and update or revise on an as-needed basis.**

OBJECTIVE 2: Make all ensuing scientific material/data available to the public except that locality data and certain details, which is considered restricted for the preservation and protection of the resource.

##### MANAGEMENT COMMON TO ALL ALTERNATIVES:

*BLM would obtain copies of research projects and published research articles based on work conducted in the Monument and establish an in-house reference collection for primary research orientation.*

OBJECTIVE 3: Actively work with organizations, schools, the scientific community, etc. to provide for scientific research on the resources.

##### MANAGEMENT COMMON TO ALL ALTERNATIVES:

- **BLM would maintain, encourage, and enter into partnerships or cooperative agreements with appropriate entities and individuals to conduct research within the Monument.**
- *In order to promote effective research, BLM would provide existing GIS, or other data as available and appropriate, to researchers when requested.*

## 2.4.11 SOILS

GOAL 1: Meet or move toward upland health standards consistent with the <i>New Mexico Standards for Public Land Health and Guidelines for Livestock Grazing Management</i> (BLM 2001) to protect and restore natural ecosystems.			
OBJECTIVE 1A: Maintain and restore watersheds through enhanced soil stability and productivity, increased soil moisture, decreased erosion, and thriving desired vegetation communities.			
MANAGEMENT COMMON TO ALL ALTERNATIVES:			
Soils would be managed to meet the <i>New Mexico Standards for Public Land Health and Guidelines for Livestock Grazing Management</i> (BLM 2001).			
ALTERNATIVE A	ALTERNATIVE B	ALTERNATIVE C	ALTERNATIVE D
<p>Continue to control soil erosion, sediment movement, and salt contamination as priority management goals through minimizing surface disturbance from construction projects, closure and rehabilitation of unneeded roads, and control off-road vehicle use in critical areas.</p> <p>Nonpoint source pollutants in watersheds and areas with critical to severe erosion would continue to be a major focus.</p> <p>Project level planning would consider the sensitivity of the watershed (soil, water, and vegetation) resources in the affected area on a site-specific basis.</p>	<p>Manage soil resources and areas needing restoration using only passive methods to meet the soil and hydrologic functions of the potential natural community or capability of the ecological site as defined by the New Mexico Standards and Guidelines.</p> <p>Passive methods would focus on prohibiting surface disturbing activities that would result in unnatural degradation of soil resources and allow soil recovery and production to occur through natural processes. Passive methods could include, but would not be limited to, removing grazing, closing roads and trails, and prohibiting actions which require the use of heavy machinery.</p>	<p>Manage soil resources and areas needing restoration using both passive and active methods, with an emphasis on non-structural approaches whenever possible, to increase the site stability and the hydrologic function to the capability of the ecological site as defined by the New Mexico Standards and Guidelines.</p> <p>Passive methods identified in Alternative B would be the same under this alternative. Active methods would involve maintenance and rehabilitation of soil resources through a variety of “hands-on” actions. These actions could include, but would not be limited to, construction of water-bars, dikes, drop-structures, re-contouring, and seeding.</p>	<p>Manage soil resources and areas needing restoration using any acceptable management practices to meet the ecological site capability for soil and site stability and the hydrologic function to the capability of the ecological site as defined by the New Mexico Standards and Guidelines.</p>

<b>Critical soils on 0-10 percent slopes would be the first priority for land treatments and grazing management to reduce erosion and improve water quality. Critical soils on slopes over 10 percent would be a priority for grazing management to reduce erosion and improve water quality</b>	<b>No management action planned.</b>	<b>Stabilize and rehabilitate areas where accelerated erosion, runoff, and physical or chemical degradation have resulted in unacceptable soil conditions through the use of non-structural approaches whenever possible.</b>	<b>Stabilize and rehabilitate areas where accelerated erosion, runoff, and physical or chemical degradation have resulted in unacceptable soil conditions through the use of any acceptable practice.</b>
<b>OBJECTIVE 1B: Stabilize soils and hydrologic processes by maintaining appropriate amounts of standing live vegetation and protective litter or rock cover, and minimize surface disturbances.</b>			
<b>ALTERNATIVE A</b>	<b>ALTERNATIVE B</b>	<b>ALTERNATIVE C</b>	<b>ALTERNATIVE D</b>
No management action planned.	<b>Prohibit surface disturbing activities and uses in areas containing high potential for soil erosion and storm water runoff.</b>	<b>Prohibit new surface disturbing activities for areas that contain a high potential for soil erosion and storm water runoff, except for activities required to meet resource goals and objectives provided impacts could be fully mitigated.</b>	<b>Allow surface disturbing activities and uses with proper mitigation in areas containing high potential for soil erosion and storm water runoff.</b>

## **2.4.12 SPECIAL DESIGNATION- ROBLEDO MOUNTAINS ACEC**

GOAL 1: Designate and manage areas that have special values, meet the relevance and importance criteria, and require special management to prevent risk of loss of or damage to those values.

OBJECTIVE 1: Manage ACECs where relevance and importance criteria are met and special management is required to protect the identified values.

### **MANAGEMENT COMMON TO ALL ALTERNATIVES:**

- **The designating Legislation Section 2104 (e) states, “*The establishment of the Monument shall not change the management status of any area within the boundary of the Monument that is (B) managed as an area of critical environment concern*” and (2) CONFLICT OF LAWS.-“*If there is a conflict between the laws applicable to the areas described in paragraph (1) and this subtitle, the more restrictive provision shall control.*”**
- **Carry forward the Robledo Mountains ACEC designation or more restrictive provisions in the Legislation in order to protect biological, cultural, and scenic values and to protect, research, and interpret paleontological values.**

Management will follow these prescriptions:

- Retain all public land.
- Limit vehicle use to designated roads and trails.
- Exclude authorizations for new rights-of-way.
- Withdraw from location, entry, and patent under the mining laws.
- Withdraw from operation of the mineral leasing laws, geothermal leasing laws, and mineral materials laws.
- Acquire legal public access.
- Maintain current livestock grazing practices.
- Allow natural fires to burn under prescribed conditions.
- Manage for primitive and semi-primitive recreation opportunities (no developed facilities).
- Manage as VRM Class I.
- Manage for Recreation Opportunity Spectrum (ROS) primitive and semi-primitive non-motorized and semi-primitive motorized classes.

See Map 3-5.

**2.4.13 SPECIAL DESIGNATION- PALEOZOIC TRACKWAYS RESEARCH  
NATURAL AREA (RNA)**

GOAL 1: Manage the paleontological resources within the Paleozoic Trackways RNA to prevent loss or damage to those resources.			
OBJECTIVE 1: Manage the resources according to the Legislation designating the Monument, <i>The Omnibus Public Land Management Act of 2009</i> , which is to protect, research, and interpret paleontological resources.			
ALTERNATIVE A	ALTERNATIVE B	ALTERNATIVE C	ALTERNATIVE D
<p><b>Manage the 720 acres, known as Paleozoic Trackways RNA, in order to protect, and allow research and interpretation of the paleontological values located within.</b></p> <p>Management will follow these prescriptions:</p> <ul style="list-style-type: none"> <li>• Retain all public land</li> <li>• Limit vehicle use to designated roads and trails</li> <li>• Exclude new rights-of-way</li> <li>• Withdraw from location, entry, and patent under the mining laws.</li> <li>• Withdraw from operation of the mineral leasing laws, geothermal leasing laws, and mineral materials laws.</li> <li>• Acquire public access</li> <li>• Manage and interpret in accordance with trackways study legislation</li> <li>• Manage as VRM Class II</li> <li>• Manage for ROS semi-primitive non-motorized class</li> </ul> <p>See Map 3-6.</p>	<p><b>The Paleozoic Trackways RNA designation would be discontinued for all land within the Monument boundary. The resources would be managed according to the Legislation and the management actions determined in the Prehistoric Trackways RMP.</b></p>		

#### 2.4.14 SPECIAL STATUS SPECIES

GOAL 1: Manage public land to maintain, restore, improve or enhance habitats that lead to the recovery of Federally-listed species populations and preclude the need for listing proposed, candidate, State protected or sensitive species.

OBJECTIVE 1: Over the life of this RMP, achieve “no net loss” of special status species habitats.

MANAGEMENT COMMON TO ALL ALTERNATIVES:

**BLM would ensure that appropriate management, protections, and mitigations would be developed and applied by continuing to monitor and inventory special status species and their habitats throughout the Monument.**

#### 2.4.15 VEGETATION

GOAL 1: Manage vegetation resources to produce healthy and vigorous native plant communities with an abundance and distribution of vegetative density and diversity within the Prehistoric Trackways National Monument.

OBJECTIVE 1: Provide a mosaic of vegetative communities within the Monument through protection and restoration of vegetation resources to protect soils, watersheds, air quality, wildlife and scenic views. Maintain sustained yield of vegetation for multiple uses.

MANAGEMENT COMMON TO ALL ALTERNATIVES:

- **The Monument would be closed to commercial and recreational plant collecting. BLM would retain plant/seed collecting authority for administrative purposes (e.g., Seeds of Success).**
- **Vegetation treatments would be in compliance with the *Vegetation Treatments on Bureau of Land Management Lands in 17 Western States Programmatic Environmental Impact Statement*.**
- **In compliance with Executive Order 13112 and BLM Manual 1745, and subject to future revisions to Bureau policy and guidance, where restoration, rehabilitation, or reclamation efforts (including Bureau authorized actions such as rights-of-way) require reseeding activities, or use of other plant materials (such as potted plants, poles, etc.), non-native plant species would be used only if native species are not readily available in sufficient quantities. Care would be taken in selecting non-native species that are not likely to become invasive. If non-native plant species are used or identified for use in restoration, rehabilitation, or reclamation projects, the BLM, through the Bureau Plant Conservation Program and partner organizations, would work to identify and develop native replacements for the non-native species. Additionally, seed mixes used in these actions would use the closest locally adapted selections, varieties, or cultivars of native species available to improve success of the seeding effort.**

ALTERNATIVE A	ALTERNATIVE B	ALTERNATIVE C	ALTERNATIVE D
<p>Creosotebush, mesquite, and other desert shrubs (&lt;10% slope) would be treated almost entirely by the use of herbicides. Areas over 10% slope, within ½-mile of a perennial stream, or within a ¼-mile of a dwelling (Unless explicit written consent is achieved by the property owner) and vegetation containing vacant or occupied raptor nests would be buffered as deemed necessary by the wildlife biologist, would not be treated with herbicide.</p>	<p>Manage vegetation communities and areas needing restoration using passive methods to meet the ecological site potential natural community (stable ecological community with successional stages completed without disturbance under present environmental conditions) and or capability (degree to-which the kind, proportions, and amounts of plants in the ecological community resemble the potential natural community based on the areas disturbance history).</p> <p>Passive methods allow the vegetation resource to naturally regenerate over time without taking direct action.</p>	<p>Manage vegetation communities and areas needing restoration using passive and active treatments to increase native vegetation to the capability of the site.</p> <p>Active methods include activities designed to enhance or improve the vegetation resource, including mechanical, cultural, biological or chemical restoration practices.</p>	<p>Manage vegetation communities and areas needing restoration using passive and active restoration to meet the ecological site capability.</p>
<p>No management action planned.</p>	<p>Manage transitioning areas and other stable-state areas for a desired state and condition to meet ecological site potential. Particular emphasis would be placed on enhancing habitat for special status species.</p>	<p>Manage transitioning areas and other stable-state areas for a desired state and condition to meet ecological site capability. Site would be managed for multiple-use values while maintaining or enhancing habitat for special status species.</p>	<p>Manage transitioning areas for a desired state and condition to meet ecological site capability. Site would be managed for emphasizing commodity uses while maintaining or enhancing habitat for special status species.</p>
<p>OBJECTIVE 3: Monitor for the potential introduction and spread of noxious weeds within the Monument and manage any noxious weeds and native invasive species.</p>			
ALTERNATIVE A	ALTERNATIVE B	ALTERNATIVE C	ALTERNATIVE D
<p>Chemical herbicides would be used to control noxious weeds.</p>	<p>Use integrated management techniques including passive, manual, and biological treatment methods to manage noxious weeds and non-native invasive species.</p>	<p>Use integrated management techniques including passive, manual, biological, chemical, and mechanical treatment methods to manage noxious weeds and non-native invasive species.</p>	<p>Use integrated management techniques including passive, manual, fire, biological, chemical, and mechanical treatment methods to manage noxious weeds and non-native invasive species.</p>

## **2.4.16 VISUAL RESOURCES**

GOAL 1: The goal for visual resources is to manage Federal land in a manner that maintains the scenic values.

OBJECTIVE 1: Ensure management activities and approved land uses are consistent with, and meet, the established VRM Class objectives.

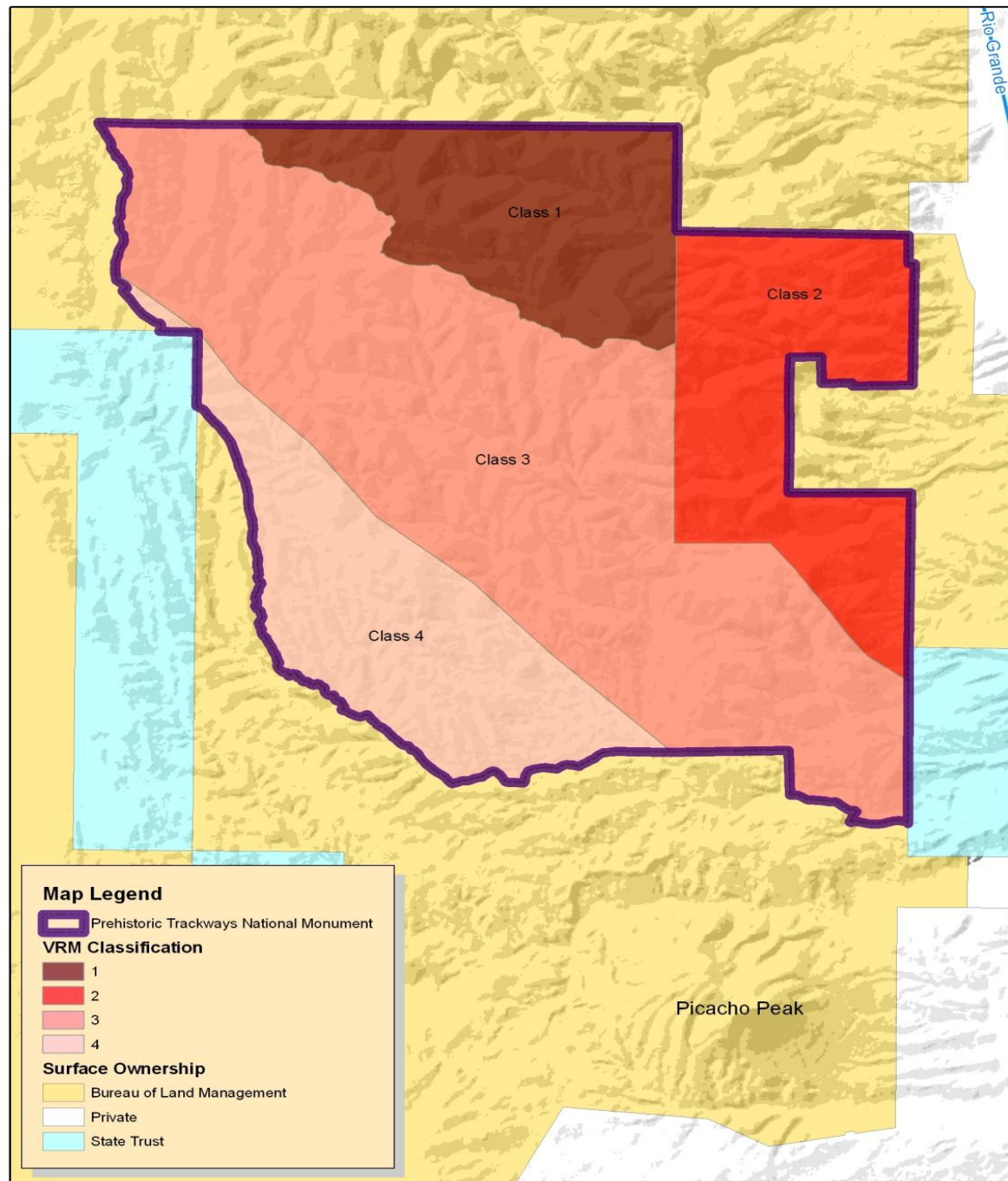
MANAGEMENT COMMON TO ALL ALTERNATIVES:

***IM 2000-096, Use of Visual Resource Management Class I Designation in Wilderness Study Areas states that WSAs until such time as these areas are designated as wilderness or released for other uses by the Congress will be assigned VRM Class I.***

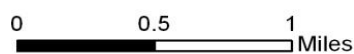
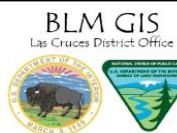
ALTERNATIVE A	ALTERNATIVE B	ALTERNATIVE C	ALTERNATIVE D
<p>The PTNM is presently divided in four VRM Class designations:</p> <ul style="list-style-type: none"> <li>• VRM Class I: 789 acres</li> <li>• VRM Class II: 907 acres</li> <li>• VRM Class III: 2,627 acres</li> <li>• VRM Class IV: 932 acres</li> </ul> <p>See Map 2-10.</p>	<p>PTNM would be classified as the following VRM Class:</p> <ul style="list-style-type: none"> <li>• VRM Class I: 1,365 acres</li> <li>• VRM Class II: 3,891 acres</li> </ul> <p>See Map 2-11.</p>	<p>PTNM would be classified as the following VRM Class:</p> <ul style="list-style-type: none"> <li>• VRM Class I: 1,042 acres</li> <li>• VRM Class II: 4,213 acres</li> </ul> <p>See Map 2-12.</p>	<p>PTNM would be classified as the following VRM Class:</p> <ul style="list-style-type: none"> <li>• VRM Class I: 789 acres</li> <li>• VRM Class II: 4,465 acres</li> </ul> <p>See Map 2-13.</p>



# Map 2-10 - Visual Resource Management, Alt A

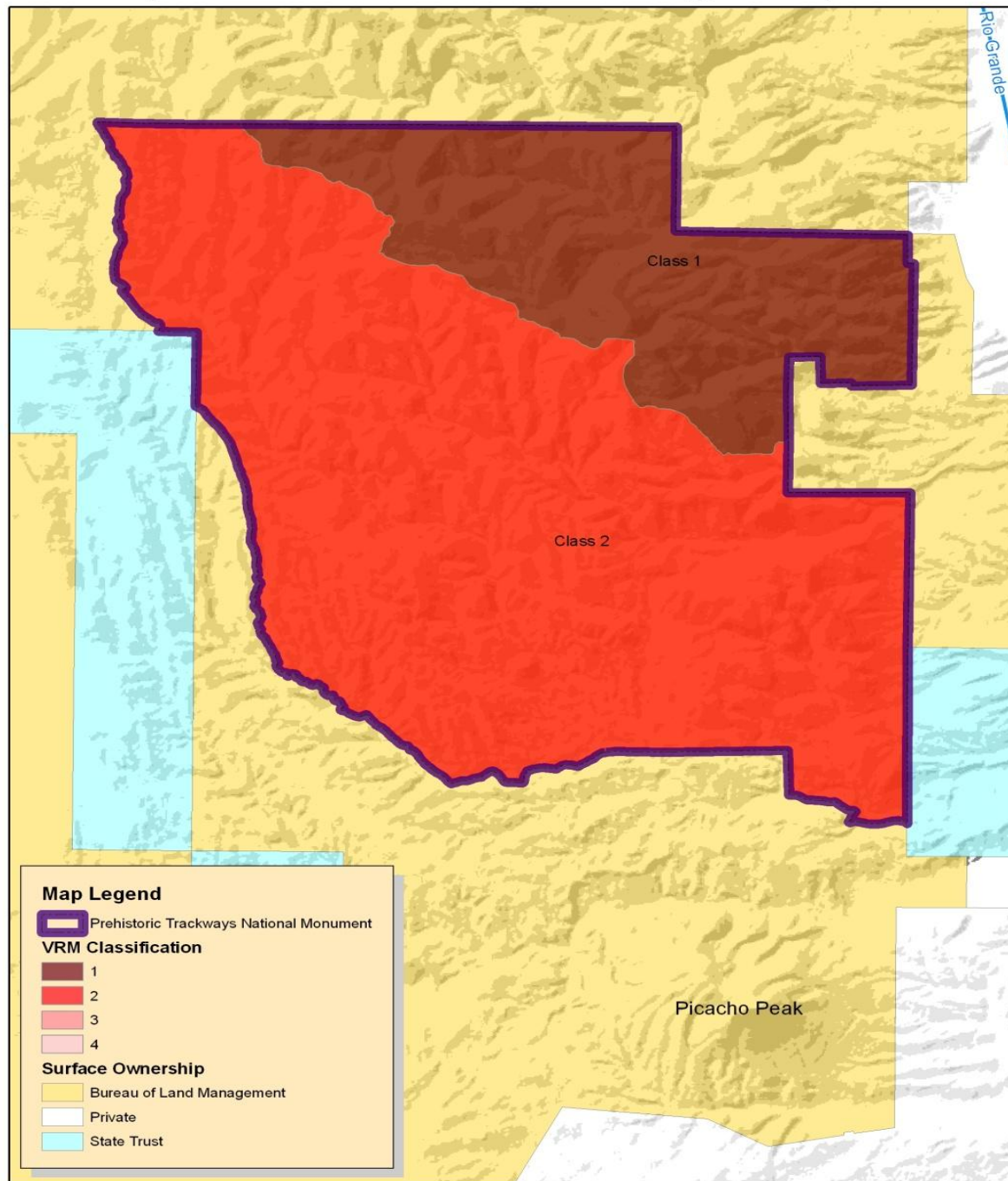


No Warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual use or aggregate use with other data, or for purposes not intended by the BLM. Spatial information may not meet National Map Accuracy Standards. This information is subject to change without notification.

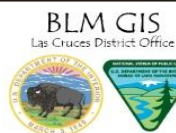


Projection: UTM Zone 13  
Datum: NAD 1983

# Map 2-11 - Visual Resource Management, Alt B



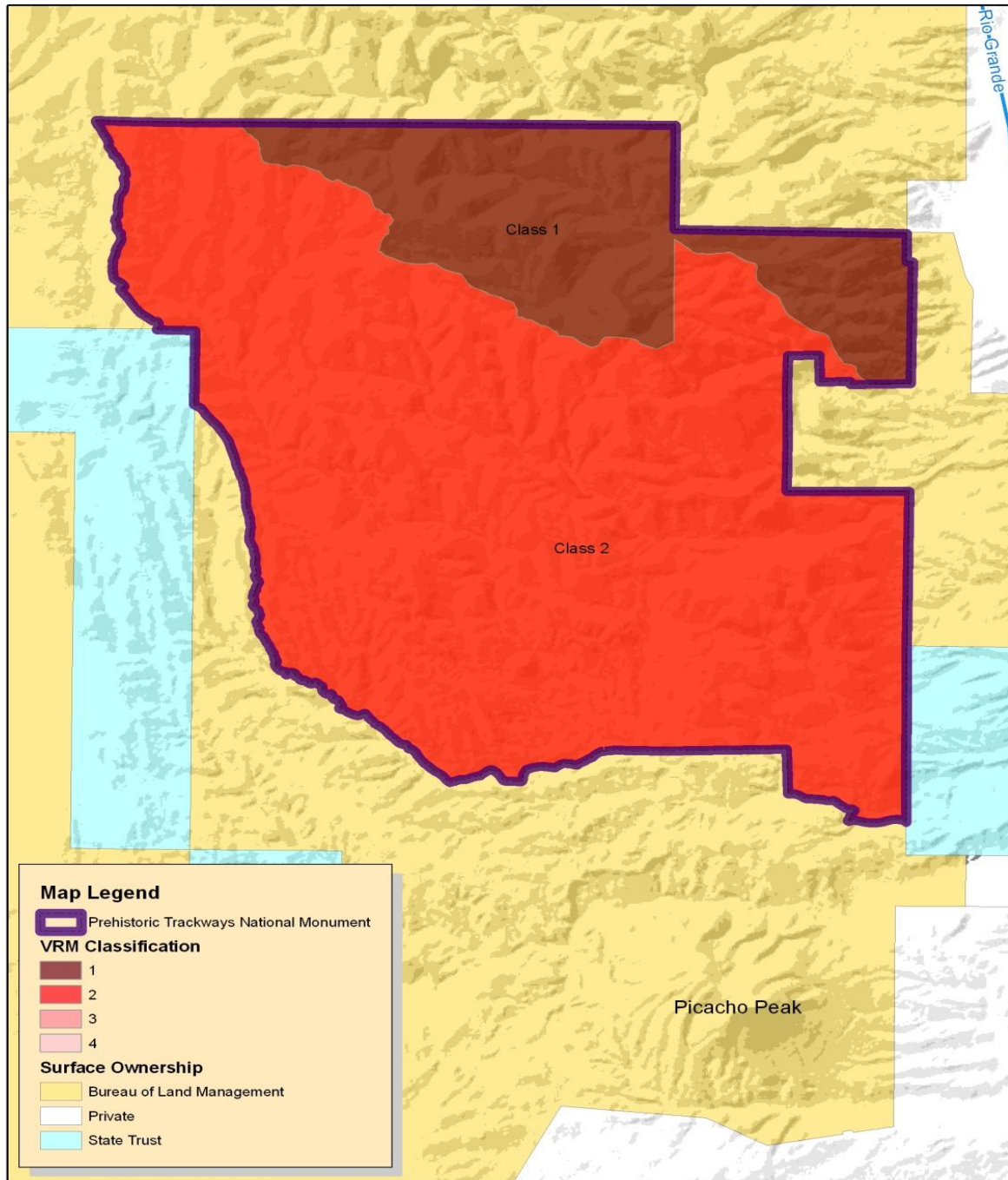
No Warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual use or aggregate use with other data, or for purposes not intended by the BLM. Spatial information may not meet National Map Accuracy Standards. This information is subject to change without notification.



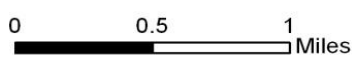
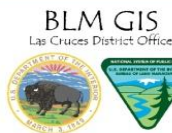
0 0.5 1 Miles

Projection: UTM Zone 13  
Datum: NAD 1983

# Map 2-12 - Visual Resource Management, Alt C



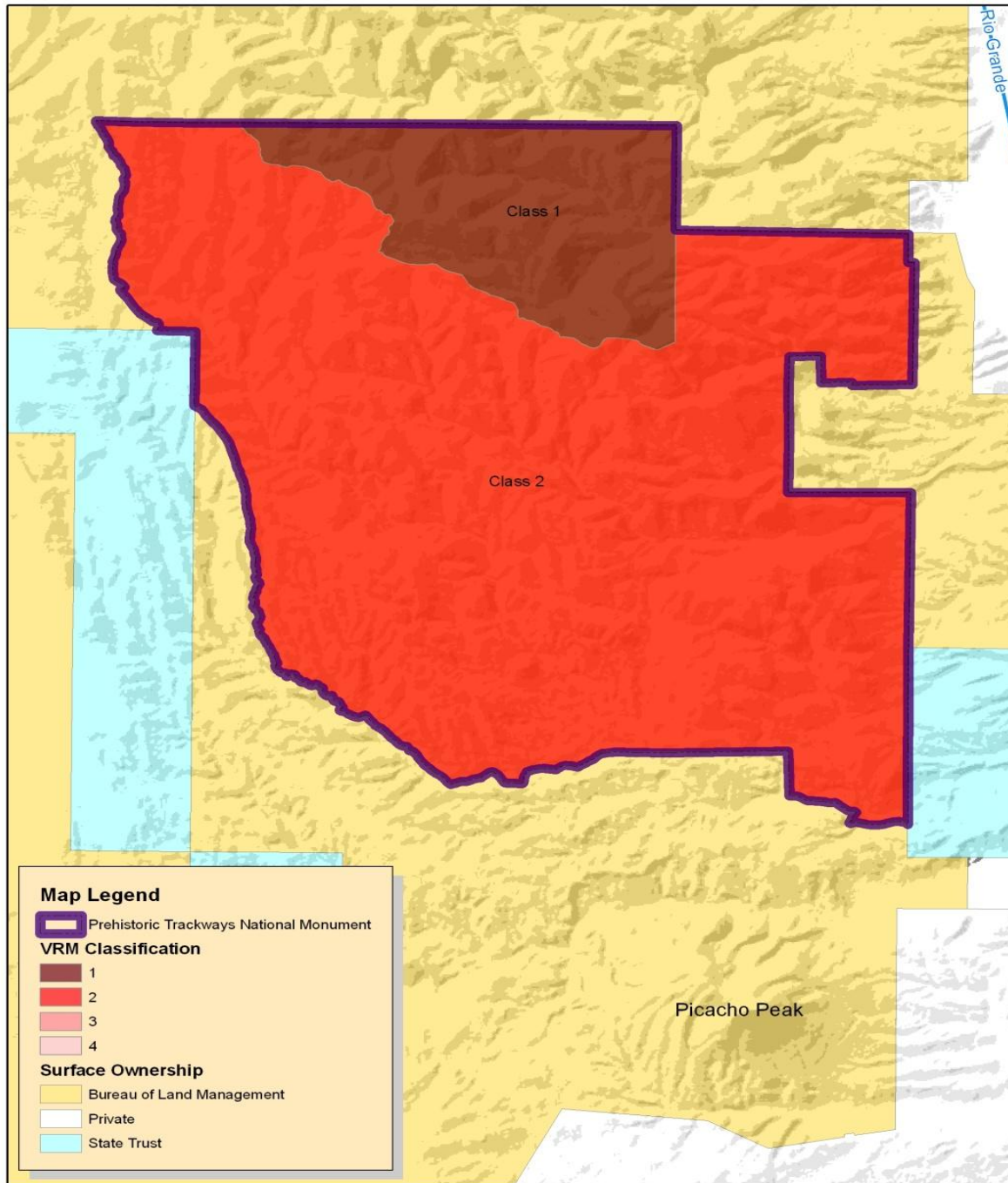
No Warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual use or aggregate use with other data, or for purposes not intended by the BLM. Spatial information may not meet National Map Accuracy Standards. This information is subject to change without notification.



Projection: UTM Zone 13  
Datum: NAD 1983



# Map 2-13 - Visual Resource Management, Alt D



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BLM GIS  
Las Cruces District Office



0 0.5 1 Miles

Projection: UTM Zone 13  
Datum: NAD 1983

## **2.4.17 WATER RESOURCES**

<p><b>GOAL 1:</b> Ensure that surface water and ground water influenced by the BLM activities comply with or are making significant progress toward achieving New Mexico water quality standards consistent with the New Mexico Environment Department (NMED) and the U.S. Environmental Protection Agency (EPA).</p>			
<p><b>OBJECTIVE 1:</b> Fully mitigate any action which may contribute nonpoint source pollutants into the Rio Grande and to protect the State's water resources.</p>			
<p><b>MANAGEMENT COMMON TO ALL ALTERNATIVES:</b></p> <ul style="list-style-type: none"> <li>• <b>Enter into cooperative management agreements or other instruments with interested parties or agencies, as appropriate, to coordinate and collaborate watershed management of the Monument.</b></li> <li>• <b>Consult and coordinate with other Federal, State, and local agencies, as directed by the Watershed Protection and Flood Prevention Act (16 U.S.C. 1001-1009), and the Clean Water Act (33 U.S.C. 1251).</b></li> </ul>			
<b>ALTERNATIVE A</b>	<b>ALTERNATIVE B</b>	<b>ALTERNATIVE C</b>	<b>ALTERNATIVE D</b>
<p>Provision for erosion control would continue to be incorporated into all surface disturbing actions.</p>	<p>Prohibit surface disturbing activities on public land within the Rio Grande watershed and areas susceptible to high amounts of erosion, except activities specifically designed for enhancing water quality.</p>	<p>Fully mitigate surface disturbing activities on public land within the Rio Grande watershed and use non-structural approaches whenever possible.</p>	<p>All surface disturbing activities would be allowed provided these activities do not contribute to further degradation of the Rio Grande or the likelihood of a stream becoming impaired from nonpoint source pollutants. Site-specific mitigation would apply to activities near 303d streams.</p>

## **2.4.18 WILDLAND FIRE MANAGEMENT**

GOAL 1: Reduce the risk to human life and property from wildland fire; reduce the risk and cost of fire suppression in areas of hazardous fuels buildup; and improve landscape health through returning fire to its natural role in the ecosystem.

OBJECTIVE 1: Reduce the potential for escaped fire or loss of life or property in surrounding areas and communities.

MANAGEMENT COMMON TO ALL ALTERNATIVES:

- **Incorporate current management as outlined in the *Resource Management Plan Amendment for Fire and Fuels Management on Public Lands in New Mexico and Texas* (BLM 2004a).**
- **Fires would be suppressed and hazardous fuels would be treated in wildland urban interface areas.**
- **A cultural and paleontological resource advisor would be consulted prior to fire suppression activities that involve surface disturbance.**
- **Any improvements within the Monument would be protected from all fire by preplanned defensible space and fire suppression tactics as needed.**
- **Resources and fire management would be integrated as potential new issues arise or objectives change. In response to new management objectives, the appropriate monitoring techniques would be developed and integrated.**

### **ALTERNATIVE A**

### **ALTERNATIVE B**

### **ALTERNATIVE C**

### **ALTERNATIVE D**

Management tools such as prescribed fire and mechanical thinning would not be considered for use in the Monument.

The use of prescribed fire and mechanical thinning as management tools based on future needs and future vegetation analysis would be considered for the Monument.

OBJECTIVE 2: Improving landscape health through treating lands in Fire Regime Condition Classes 2 and 3 to achieve the desired future condition of the landscape of Fire Regime Condition Class 1. Maintain Condition Class 1 where it occurs. See Map 3-11

MANAGEMENT COMMON TO ALL ALTERNATIVES:

**In Fire Management Units categorized as C or D, natural ignitions (lightning started fires) could be managed for resource benefit. See Map 3-12.**

### **ALTERNATIVE A**

### **ALTERNATIVE B**

### **ALTERNATIVE C**

### **ALTERNATIVE D**

Management tools such as prescribed fire and mechanical thinning would not be considered for use in the Monument.

The use of prescribed fire and mechanical thinning as management tools based on future needs and future vegetation analysis would be considered for the Monument.

#### 2.4.19 WILDLIFE

GOAL 1: In cooperation with New Mexico Department of Game and Fish (NMDGF), manage public land to provide sufficient quantity and quality of wildlife habitat and to maintain or enhance wildlife populations and biological diversity.

OBJECTIVE 1: Protect, enhance, and where appropriate, restore native wildlife and wildlife habitats by the following:

- Managing public land to attain the biotic and other standards for public land health in conjunction with the *New Mexico Standards for Public Land Health and Guidelines for Livestock Grazing Management (BLM 2001)*.
- Managing for Species of Greatest Conservation Need and Key Habitats identified in the NMDGF's *Comprehensive Wildlife Conservation Strategy (CWCS)*.
- Implementing the BLM Robledo Habitat Management Plan (HMP) or other cooperatively developed Federal, State, or local activity plans and wildlife habitat projects consistent with habitat management goals and objectives.
- Managing public land to allow for reintroductions, transplants, and augmentations of native wildlife populations in coordination with the NMDGF or the U.S. Fish and Wildlife Service and consistent with applicable agency policies and habitat and population management plan goals
- Maintaining and restoring habitat connectivity in and between public land including breeding, foraging, dispersal, and seasonal use habitats.

MANAGEMENT COMMON TO ALL ALTERNATIVES:

- Develop and implement the following HMPs (or a Coordinated Resource Management Plan (CRMP)): Robledo Mountains HMP (for deer, antelope, upland game species)
- Animal Damage Control (ADC) actions would be conducted in accordance with annual ADC plans.

## 2.5. SUMMARY COMPARISON OF IMPACTS

The table below summarizes the impacts by resource by alternative for the PTNM. These impacts are fully discussed in Chapter 4. The dark gray shaded boxes list the resource or use and the boxes with no shading are the estimated impacts per alternative.

The following resources have been found to have negligible or no impacts from any of the management alternatives proposed:

American Indian Uses and Traditional Cultural Practices
Riparian Areas
Woodland Management
Floodplains and Wetlands
Geology
Minerals
Hazardous and Solid Wastes
Prime or Unique Farmlands
Wild and Scenic Rivers



**TABLE S-1**  
**SUMMARY OF IMPACTS BY RESOURCE BY ALTERNATIVE**

<b>ALTERNATIVE A</b>	<b>ALTERNATIVE B</b>	<b>ALTERNATIVE C (PREFERRED)</b>	<b>ALTERNATIVE D</b>
<b>PALEONTOLOGICAL RESOURCES</b>			
Casual collecting of common invertebrate and plant paleontological resources would continue to be allowed. SRPs would continue to be considered for authorization. Vehicle use has the potential to damage the paleontological resources through crushing and fracturing or staining the specimens with petroleum based fluid. Focus on development of off-site interpretation would create additional protection for the resource by increasing awareness and leaving sites conserved in-situ for future research. Continued management of the Research Natural Area (RNA) would provide redundant management prescriptions that protect the resources on 720 acres within the Monument.	Restriction of casual collecting of common invertebrate and plant paleontological resources reduces the likelihood of loss of scientific-worthy vertebrate fossils. This closure to casual invertebrate and plant paleontological collecting also reduces the educational and recreational opportunities within the Monument. Focus on development of off-site interpretation could create additional protection for the resource by increasing awareness and leaving paleontological sites conserved in-situ for future research. Closure of the Monument to motorized and mechanized travel would eliminate damage to the paleontological resources from this use. SRPs would not be authorized, which would eliminate any group impacts, positive or negative. Reducing overall public access to the PTNM may result in an overall reduction in the opportunity for recreation, education, vandalism, and looting of resources. The removal of the RNA designation removes the redundancy in management prescriptions.	Restriction of casual collecting of common invertebrate and plant paleontological resources reduces the likelihood of loss of scientific-worthy vertebrate fossils. Limited collecting of common invertebrate paleontological resources in conjunction with BLM approved activity would reduce the potential for loss of vertebrate fossils and increase the educational and recreational paleontological opportunities. On-site interpretation and education would increase awareness of the resource but could increase the potential for looting. Development of visitor facilities could increase visitation and thereby result in increased stewardship, vandalism, and looting. Issuance of SRPs could lead to the same impacts as stated in Alternative A. Closing of routes within the Monument where paleontological resources are present would limit destruction of these resources caused by motorized and mechanized vehicles along those routes; however the impacts associated with use would remain along open routes. The removal of the RNA designation removes the redundancy in management prescriptions.	Same as Alternative C except, both the beneficial and adverse impacts from on-site interpretation and facilities would be increased due to more development. Impacts from vehicle use would be slightly increased due to 1.4 more miles of designated routes than Alternative C.

**TABLE S-1  
SUMMARY OF IMPACTS BY RESOURCE BY ALTERNATIVE**

<b>ALTERNATIVE A</b>	<b>ALTERNATIVE B</b>	<b>ALTERNATIVE C (PREFERRED)</b>	<b>ALTERNATIVE D</b>
<b>INTERPRETATION AND EDUCATION</b>			
Scientific research would enhance interpretation and education by discovery of new sites and additional information. Casual collecting of common invertebrate and plant paleontological resources would enhance the educational experience in the Monument. Restriction of development of facilities and trails would limit the interpretive experience on-site.	Same as Alternative A, except casual collecting of common invertebrate and plant paleontological resources would not be allowed and would therefore limit the on-site interpretive experience. Lands with Wilderness Characteristics would limit any surface disturbance in those lands protected for their naturalness (576 acres). This would limit any interpretative trails or signs.	In addition to impacts stated in Alternative A, on-site interpretation, trails and facilities would be developed enhancing the educational opportunities. Casual collecting of common invertebrate and plant paleontological resources would not be allowed. Collecting of common invertebrate paleontological resources while in conjunction with a BLM authorized activity would enhance the educational experience. Additional legal access would be acquired allowing for improved access to the Monument's interpretive sites. Lands with Wilderness Characteristics would limit any surface disturbance in those lands protected for their naturalness (253 acres), which would limit any interpretative trails or signs.	Same as Alternative C, except increased benefits to interpretation and education would be possible from the development of a motorized interpretive tour or a visitor center, and development could occur in lands identified for their naturalness.
<b>RECREATION AND VISITOR SERVICES</b>			
The opportunity for casual collecting of common invertebrate and plant paleontological resources provides an additional recreational opportunity. The lack of on-site interpretative and visitor facilities limits the visitor experience within the Monument and may reduce visitation from some groups. Target practicing within the Monument could cause conflict between users. No planned improvement or maintenance of trails could limit the recreation opportunities available within the Monument, but the existing designated routes would remain open to motorized or mechanized use.	Same as Alternative A with respect to facilities and improvements. Casual collecting of common invertebrate and plant paleontological resources, SRPs, and motorized and mechanized vehicles use would not be allowed, thus reducing the number of recreation opportunities available within the Monument.	The opportunity for collecting common invertebrate paleontological resources while in conjunction with a BLM authorized activity would provide an additional recreational opportunity. Development of on-site interpretation and visitor facilities would enhance the visitor experience and may increase visitation from some user groups. Facility development could also impact the natural setting of the Monument. Closure of a portion of the Robledo Mountains Off-Highway Vehicle (OHV) trails would impact the more extreme OHV users. Ability to maintain and develop new trails and routes would enhance opportunities for recreational and scientific use.	Same as Alternative C except, 1.4 miles more of mechanized and motorized route would remain open providing opportunities to access more extreme routes. A visitor center and a developed campground would be established therefore creating a more developed Monument.

**TABLE S-1  
SUMMARY OF IMPACTS BY RESOURCE BY ALTERNATIVE**

<b>ALTERNATIVE A</b>	<b>ALTERNATIVE B</b>	<b>ALTERNATIVE C (PREFERRED)</b>	<b>ALTERNATIVE D</b>
<b>TRAILS AND TRAVEL MANAGEMENT</b>			
Continued use of the existing 37.6 miles of designated trails provides an extensive route network with a variety of opportunities for motorized, mechanized, and pedestrian use and travel. Improvement or maintenance of existing routes have not been planned for, which reduces the ease of access for educational and some recreational uses.	Closing the Monument to motorized and mechanized travel would reduce access to most of the Monument for most visitors, but would reduce paleontological resources damage or destruction from this use. Improvement or maintenance of existing routes have not been planned for, which reduces the ease of access for educational and some recreational uses. On the 576 acres of Lands with Wilderness Characteristics, construction or improvement of trails and routes would not be allowed.	Limiting motorized and mechanized travel to 32.2 miles of designated routes would still provide an extensive route network with a variety of opportunities for use while protecting known occurrences of paleontological resources. Development of facilities and interpretation may increase the need for additional routes and increased maintenance. This would be allowed within the Monument except within the WSA and the 253 acres identified as Lands with Wilderness Characteristics.	Same as Alternative C, except 33.6 miles of trail would be designated. Lands with Wilderness Characteristics would not be designated, which would then allow for surface disturbing route or trail construction within the lands identified (but not designated) as having wilderness characteristics.
<b>AIR RESOURCES AIR QUALITY</b>			
Vehicle travel on 37.6 miles of designated trails has the potential to emit pollutants and cause dust. Surface disturbance from potential authorized rights-of-way could cause dust emissions. Unplanned wildfire events may also release emissions and reduce visibility.	Closing the Monument to motorized and mechanized use, rights-of-way construction, and SRPs would reduce the potential for emissions and dust compared to Alternative A. Limitations on surface disturbing activities on susceptible soils and within the 576 acres of Lands with Wilderness Characteristics would reduce dust emissions compared to Alternative A.	Same as Alternative A, except that travel would be limited to 32.2 miles and the Lands with Wilderness Characteristics area would be 253 acres. Protection of Lands with Wilderness Characteristics includes limitations on surface disturbance. Construction of facilities could cause emissions. It is not expected that this will change impacts to air quality from the current condition reflected in Alternative A.	Same as Alternative C, except that travel would be limited to 33.6 miles and no area is protected as Lands with Wilderness Characteristics; which would be off-limits for surface disturbance. It is not expected that this would change impacts to air quality from the current condition reflected in Alternative A.
<b>AIR RESOURCES CLIMATE</b>			
It is not possible to predict with certainty the potential emissions (or sequestration) of greenhouse gases (GHG) associated with each of these four alternatives, their potential impacts on temperature within the Planning Area, or related impacts on resources due to climate change. In general, trails and travel management, livestock grazing, and wildland fires generate GHG emissions that contribute to climate change and, in turn, may impact resources. Related activities such as wildland fire management may result in carbon sequestration and offset increases in GHG emissions.			

**TABLE S-1  
SUMMARY OF IMPACTS BY RESOURCE BY ALTERNATIVE**

<b>ALTERNATIVE A</b>	<b>ALTERNATIVE B</b>	<b>ALTERNATIVE C (PREFERRED)</b>	<b>ALTERNATIVE D</b>
<b>CULTURAL RESOURCES</b>			
Surface disturbing activities such as vehicular travel, research, development of rights-of-way, and vegetation treatments would have the potential to impact cultural resources; however, the BLM would comply with Section 106 of the National Historic Preservation Act (NHPA) for all surface disturbing activities thereby minimizing impacts to cultural resources. Socio-cultural properties also known as Traditional Cultural Properties are those places of traditional cultural significance to American Indians and others. Such properties may exist within the boundaries of the PTNM, but no specific place or resource has yet to be identified during formal consultation.	Closure of the Monument to rights-of way, vehicular travel and other surface disturbing activities would greatly reduce the potential impacts to cultural resources.	Same as Alternative A	Same as Alternative A
<b>LANDS AND REALTY</b>			
Lands and Realty decisions would make available 4,491 acres for surface disturbing land use authorizations and 5,280 acres of non-surface disturbing authorizations. Visual Resource Management (VRM) designations for the Monument would impact authorizations (VRM Class I: 789 acres, VRM Class II: 907 acres, VRM Class III: 2,627 acres, VRM Class IV: 932 acres). Commercial renewable energy authorizations would be excluded from the entire Monument. One legal access easement would be sought for the Monument.	Land and Realty decisions would exclude the Monument from all surface disturbing land use authorizations. One legal access easement would be sought for the Monument. The BLM would attempt to obtain 640 acres of non-Federal mineral estate within and adjacent to the Monument, which would eliminate any split estate issues.	Management of Lands with Wilderness Characteristics would limit an additional 253 acres from surface disturbing authorizations. Management of visual resources could limit or modify future land use authorizations to comply with VRM classes I (1,042 acres) and II (4,213 acres). Three legal access easements would be sought for the Monument. The BLM would attempt to obtain 640 acres of non-Federal mineral estate within and adjacent to the Monument, which would eliminate any split estate issues.	Same as Alternative C except no Lands with Wilderness Characteristics and VRM prescriptions would have impacts on land use authorizations due to VRM Class I acres at 789 acres and VRM Class II at 4,465 acres.
<b>LANDS WITH WILDERNESS CHARACTERISTICS</b>			
Lands with Wilderness Characteristics would be at risk for reduced naturalness as	576 acres of Lands with Wilderness Characteristics would be protected by the	253 acres of Lands with Wilderness Characteristics would be protected by the	Same as Alternative A except the designation of the Monument as VRM I and II

**TABLE S-1**  
**SUMMARY OF IMPACTS BY RESOURCE BY ALTERNATIVE**

<b>ALTERNATIVE A</b>	<b>ALTERNATIVE B</b>	<b>ALTERNATIVE C (PREFERRED)</b>	<b>ALTERNATIVE D</b>
there would be no additional protections.	management prescriptions provided.	management prescriptions provided and the remaining 323 acres would be at risk for reduced naturalness from potential surface disturbing activities. Designation of the Monument as VRM I and II would help retain wilderness characteristics.	would help retain wilderness characteristics.
<b>LIVESTOCK GRAZING</b>			
Increased visitation could cause increased conflicts with livestock and recreational users. Vegetation treatments could improve forage and reduce competition.	Livestock grazing would be excluded causing need for fencing and adjustment of the Picacho Peak and Altamira allotment management. The estimated cost of a new perimeter fence would be over \$230,000. This decision would reduce the animal unit months (AUMs) by 454 for the areas within the two allotments.	Same as Alternative A, except an additional 253 acres would be excluded from development of range improvements, which may reduce the use of the range. Fences would be constructed around campsites or in areas to protect significant paleontological resources when determined necessary. The amount of available forage would be reduced by approximately 1 AUM for every 12 acres excluded. As routes are constructed or maintained, the chance of potential interaction between livestock and visitors increases.	Same as Alternative A with more anticipated interactions between visitors and livestock as visitor facilities and routes increase.
<b>SOCIO-ECONOMIC CONDITIONS</b>			
Designation of 37.6 miles of roads and trails open to motorized and mechanized uses supports social values related to public land access and OHV recreation. However, Alternative A also has the lowest levels of non-market economic values and the least support for social values related to preservation of ecological health and wilderness. Social and economic consequences of grazing are the same under Alternatives A, C, and D. Since all alternatives continue to support similar levels of employment and income, none of the decisions are expected to disproportionately or	<p>Elimination of grazing on the Monument would reduce labor income to ranchers.</p> <p>Alternative B would support the highest levels of non-market economic values and social values related to protection of natural and cultural resources.</p> <p>Since all alternatives continue to support similar levels of employment and income, none of the decisions are expected to disproportionately or adversely affect environmental justice communities.</p>	<p>Development of a visitor contact station would cause temporary increase in local employment and labor income during construction phase.</p> <p>Alternative C balances social values of access and motorized recreation with values related to ecological health and wilderness.</p> <p>Social and economic consequences of grazing are the same under Alternatives A, C, and D.</p> <p>Since all alternatives continue to support similar levels of employment and income, none of the decisions are expected to</p>	<p>Development of a visitor center would cause increase in employment and labor income due to construction, operation, and maintenance of facility.</p> <p>Social and economic consequences of grazing are the same under Alternatives A, C, and D.</p> <p>Since all alternatives continue to support similar levels of employment and income, none of the decisions are expected to disproportionately or adversely affect environmental justice communities.</p>

**TABLE S-1  
SUMMARY OF IMPACTS BY RESOURCE BY ALTERNATIVE**

<b>ALTERNATIVE A</b>	<b>ALTERNATIVE B</b>	<b>ALTERNATIVE C (PREFERRED)</b>	<b>ALTERNATIVE D</b>
adversely affect environmental justice communities.		disproportionately or adversely affect environmental justice communities.	
<b>SOILS</b>			
Excavations of paleontological resources could cause highly disturbed localized areas, small in scale with little impacts to the watershed as a whole. Casual collecting of common invertebrate and plant paleontological resources would have minor disturbance. Soil disturbance could also be caused from foot traffic associated with recreation and interpretation tours, scientific research, dispersed camping, SRPs, vehicular travel, right-of-way development, and range improvements. Spill of petroleum products could contaminate soils.	Slightly less damage from paleontological resource decisions since casual collecting is restricted. Other surface disturbing restrictions that would be beneficial to soil protection are closure of the Monument to vehicular travel, SRPs, camping, livestock grazing, and surface disturbing land use authorizations.	Same as Alternative A except, the development of visitor facilities would displace and compact soils increasing runoff and erosion rates.	Same as Alternative C with slightly more disturbance from the development of a Visitor Center.
<b>SPECIAL DESIGNATION- AREA OF CRITICAL ENVIRONMENTAL CONCERN</b>			
789 acres would be managed as the Robledo Mountains ACEC	Same as Alternative A.	Same as Alternative A.	Same as Alternative A.
<b>SPECIAL DESIGNATION- RESEARCH NATURAL AREA</b>			
The RNA designation would stay as is and the management prescriptions would essentially be duplicated by the Legislation.	The RNA designation would be removed therefore the duplicate management prescriptions would be eliminated. However, management of the resources would continue the protections afforded by the RNA designation	Same as Alternative B.	Same as Alternative B.
<b>SPECIAL DESIGNATION- WILDERNESS STUDY AREA</b>			
789 acres would be managed as the Robledo Mountains WSA.	Same as Alternative A.	Same as Alternative A.	Same as Alternative A.

**TABLE S-1  
SUMMARY OF IMPACTS BY RESOURCE BY ALTERNATIVE**

<b>ALTERNATIVE A</b>	<b>ALTERNATIVE B</b>	<b>ALTERNATIVE C (PREFERRED)</b>	<b>ALTERNATIVE D</b>
<b>SPECIAL STATUS SPECIES</b>			
Vehicular travel and dispersed recreation has the potential to temporarily displace special status species or injure slow moving species. Livestock grazing improvements would benefit special status species by providing water facilities. Vegetation management would improve forage for some species.	Closure to motorized and mechanized travel would reduce potential for injury. Elimination of livestock grazing could reduce forage competition, but would also have adverse impacts by eliminating livestock improvement water sources. Vegetation management would improve forage for some species.	Same as Alternative A except development of visitor facilities and additional routes could increase the possibility of temporary displacement of special status species or injure slow moving species.	Same as Alternative C.
<b>VEGETATION</b>			
Special designations would protect 789 acres from surface disturbing activities. Activities associated with use of trails and routes have the potential to remove or damage vegetation and spread noxious weeds. Livestock grazing removes forage from the Monument annually, with 30 to 50 percent utilization of key forage species and has the potential to introduce or spread noxious weeds. Vegetation treatments have the potential to shift species dominating treated areas.	Limitations on surface disturbing activities such as vehicular travel, SRPs, and authorization of rights-of-way, would reduce the potential for damage to vegetation. Elimination of livestock grazing within the Monument would increase the amount of plant biomass to accumulate. In addition to the 789 acres protected by Special Designations, an additional 576 acres would be protected from all surface disturbing activities through protection as Lands with Wilderness Characteristics. Treatment options would be limited for noxious weed control.	Same as Alternative A except an additional 253 acres would be protected from surface disturbing activities through protection as Lands with Wilderness Characteristics. Additionally, development of new trails, routes, or facilities outside of those 1,042 protected acres would remove vegetative cover.	Same as Alternative A except additional surface disturbance and vegetation removal is possible from the development of new trails and facilities.
<b>VISUAL RESOURCES</b>			
VRM Class I designation would preserve the character of the landscape on approximately 789 acres of the most scenic, natural appearing, and visually sensitive parts of the Monument.  VRM Class II designation would retain the existing character of the landscape on approximately 907 acres of the Monument.	VRM Class I designation would preserve the character of the landscape on approximately 1,365 acres of the most scenic, natural appearing, and visually sensitive parts of the Monument.  VRM Class II designation would retain the existing character of the landscape of approximately 3,912 acres	VRM Class I designation would preserve the character of the landscape on approximately 1,042 acres of the most scenic, natural appearing, and visually sensitive parts of the public land in the Monument.  VRM Class II designation would retain the existing character of the landscape of approximately 4,213 acres within the Monument.	VRM Class I designation would preserve the character of the landscape on approximately 789 acres of the most scenic, natural appearing, and visually sensitive parts of the public land in the Monument.  VRM Class II designation would retain the existing character of the landscape of approximately 4,465 acres

**TABLE S-1  
SUMMARY OF IMPACTS BY RESOURCE BY ALTERNATIVE**

<b>ALTERNATIVE A</b>	<b>ALTERNATIVE B</b>	<b>ALTERNATIVE C (PREFERRED)</b>	<b>ALTERNATIVE D</b>
<p>The remaining lands within the Monument would be designated as VRM Class III and IV, which allows more change in the visual character of the land.</p> <p>Development of non-Federal minerals, which 368 acres are within the Monument, has the potential to impact visual resources in the Monument.</p>	<p>within the Monument.</p> <p>Exclosure of livestock from the Monument could cause visual impacts from development of a fence.</p>		<p>within the Monument.</p>
<b>WATER RESOURCES</b>			
<p>Surface disturbing activities have the potential to create nonpoint source pollutants that could be transported to the Rio Grande as well as decreased infiltration, increased runoff, and changes in water flow patterns.</p>	<p>Restrictions in surface disturbing activities would help soil stability and productivity and aid vegetation communities necessary to slow water velocities, hinder erosion, and reduce potential nonpoint source pollution.</p>	<p>Same as Alternative A in comparison to surface disturbing potential</p>	<p>Same as Alternative A in comparison to surface disturbing potential.</p>
<b>WILDLAND FIRE MANAGEMENT</b>			
<p>Increased visitation and associated recreation activities could increase potential for man caused wildfires. Vegetation treatments could cause an increase in fuel loading resulting in unwanted fire behavior.</p>	<p>Same as Alternative A except some recreation activities would be limited including camping and use of motorized vehicles that could reduce potential of man caused wildfires. Reduction in livestock grazing would increase fuels and the likelihood that a wildfire would carry.</p>	<p>Same as Alternative A except visitation could increase due to increased facilities.</p>	<p>Same as Alternative C.</p>
<b>WILDLIFE</b>			
<p>Increase in visitation and associated recreation activities could temporarily displace wildlife. Vehicular travel has the potential to injure slow moving wildlife. Water facilities for livestock would benefit local wildlife.</p>	<p>Closure to travel would decrease potential injury and displacement of wildlife. Removal of livestock could increase forage for wildlife, but would remove availability of waters.</p>	<p>Same as Alternative A except increased displacement could occur around developed interpretation sites and facilities. Water facilities for livestock would benefit local wildlife.</p>	<p>Same as Alternative C, except the ability to treat vegetation through prescribed fire could displace, kill or render habitat unsuitable for wildlife but would have long-term benefits to habitat.</p>